# SOAP

## SANITARY CHEMICALS

LIBRARY
UNIV OF IDAHO

*Enduring*

## QUALITY

WHEN you incorporate Ungerer perfuming materials into any of your Soap products, you are insuring odor persistence. The enduring quality inherent in all Ungerer products guarantees that result. Our strict adherence to these quality standards suggests in many ways the classic sculptory of ancient Grecian times, which was in that age a leading exponent of Enduring Quality.

•

## UNGERER & CO.

161 SIXTH AVENUE NEW YORK

*May 1944*

# *Back* ON THE JOB *Again!*

At the end of this present war the biggest problem for us will be to keep *men working*. To keep plants busy. To keep our industry in a healthy condition.

Everything which can be done now to prepare for that time will aid us in solving the problem then.

Our organization, through research and earnest effort to extend the best possible service to our customers at the present time, is preparing now for the reconstruction period which will surely come later.

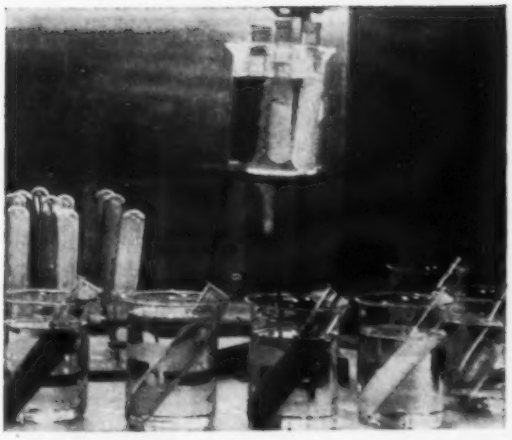
*Aromatics Division*

**GENERAL DRUG COMPANY**

**644 PACIFIC STREET, BROOKLYN 17, N. Y.**

9 SO. CLINTON STREET, CHICAGO 6 1019 ELLIOTT ST., W., WINDSOR, ONT.

It is a relief to every firm which receives a Fuld Bros. shipment to see that the pressure of the times has in no way interfered with Fuld Bros. quality. In peace, in war, Fuld Bros. sanitary and maintenance chemicals impress the user, get the business, and make the leader, on a QUALITY basis.



● Boiling test and the testing of films in different types of solutions are here shown. All floor seals must pass similar rigid tests. Continuous tests and checks protect Fuld quality.

Fuld Brothers

702 S. Wolfe St., Baltimore 31, Md.

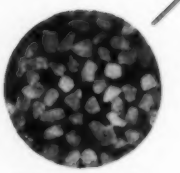
2444 E. 8th St., Los Angeles 21, Calif.

New York Sales Office: 55 W. 42nd St., CHickering 4-2538

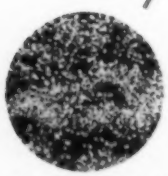
Liquid Soaps, Floor Seals, Floor Treatments, Deodorant Blocks, Liquid Deodorants, Plumbing Specialties, Special Cleaners, Self-Polishing Waxes, Powdered Waxes, Oil Soaps, Liquid Cleaners, Disinfectants, Insecticides, Metal Polishes. Furniture Polishes, Deodorant Block Holders. Soap Dispensers.

# SANTOCHLOR ...THE SERVANT OF MANY

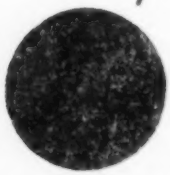
(para-Dichlorobenzene)



No. 2 (Large crystals). For shaker top cans.



No. 34 (Medium crystals). A combination of two uniformly sized crystals for shaker top cans and for compressing into cakes



No. 5 (Small crystals). For combatting peach tree borers, other insects, miscellaneous uses.

HIGH PURITY and uniform quality of Santochlor make it effective in any of its wide range of applications. You will find it used as an intermediate in the production of dyestuffs, to control moths, to combat peach tree borers.

The free-flowing, white crystals of Monsanto Santochlor vaporize completely upon application. Quantities of Santochlor are limited, but we are doing our best to serve our customers. For details, contact the nearest Monsanto office or write: MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 South Second Street, St. Louis 4, Missouri. District Offices: New York, Chicago, Boston, Detroit, Charlotte, Birmingham, Los Angeles, San Francisco, Montreal, Toronto

MONSANTO CHEMICALS

SERVING INDUSTRY...WHICH SERVES MANKIND

Volume XX Number 5

# SOAP and SANITARY CHEMICALS

Reg. U. S. Pat. Office

MAY
1944

SANITARY Products Section, which forms a part of every issue of SOAP, Begins on page 71.

## Contents


- Editorials ..... 23
- Rug and Upholstery Cleaners..... 25
- Soap Supply Outlook..... 28
  By Dr. C. W. Lenth
- Oil Decolorizing ..... 31
  By John P. Harris
- The Way It Looks in Washington..... 33
  By C. H. Jenkins
- Glycerine Production and Use..... 34
- Manufacture of Liquid Soap..... 57
- Synthetic Roach Powders..... 102
- D. D. T. Publications..... 107
- Army Aerosol Program..... 110
- Spray Device for Athlete's Foot Control..... 115
- Bids and Awards..... 47
- New Trademarks ..... 49
- Raw Material Markets..... 53
- Products and Processes..... 63
- New Patents ..... 65
- New Equipment ..... 67
- Over the Transom..... 117
- Classified Advertising ..... 129
- Advertisers' Index ..... 133


MEMBER AUDIT BUREAU OF CIRCULATIONS

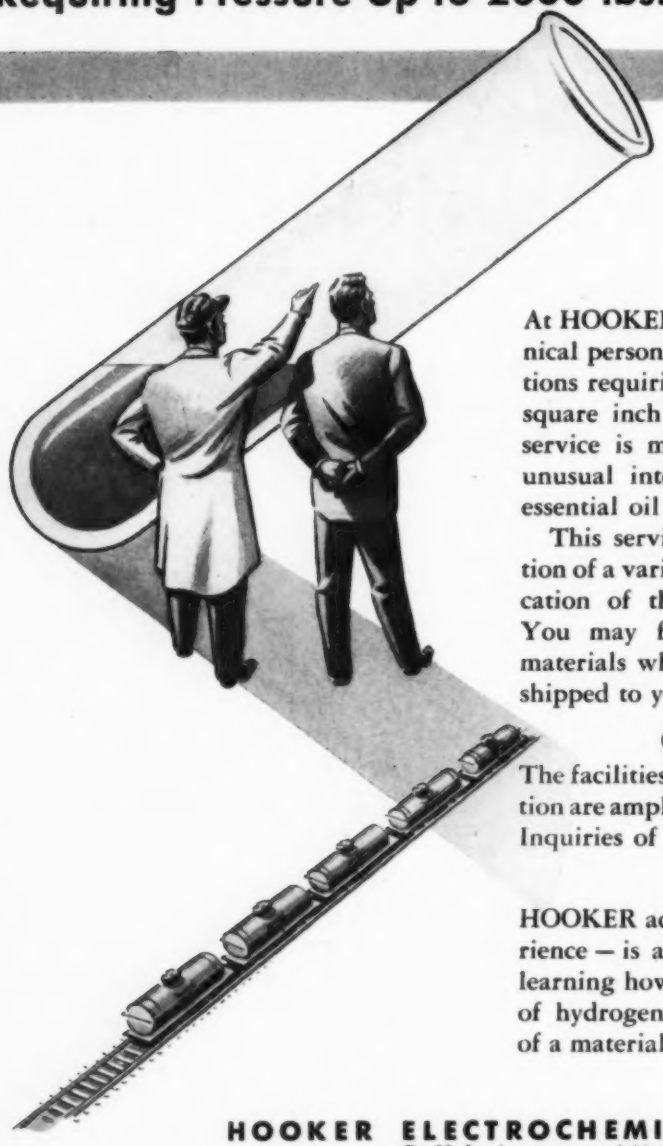
Published by

MAC NAIR-DORLAND COMPANY, INC.
254 WEST 31st STREET NEW YORK, N. Y.

Subscription rate, $3.00 per year. Foreign, including Canadian, $4.00. Copy closing dates—22nd of month preceding month of issue for reading matter and 10th of month preceding month of issue for display advertising. Reentered as second-class matter, Feb. 9, 1938, at Post Office, New York, under act of March 3, 1879. Mail circulation, April, 1944, issue 3,838 copies. Total circulation, 4000.

# INTERESTED IN HYDROGENATIONS

## Requiring Pressure Up to 2000 lbs. per Sq. Inch? 250° C?



At HOOKER an entire department with its technical personnel specializes in custom hydrogenations requiring pressures up to 2000 pounds per square inch and up to 250° C. As a result, a service is made available which should be of unusual interest to chemists in the drug and essential oil fields.

This service includes the regular hydrogenation of a variety of materials — each to the specification of the individual HOOKER customer. You may furnish HOOKER with your raw materials which will then be hydrogenated and shipped to you.

### CARLOAD QUANTITIES

The facilities of HOOKER for custom hydrogenation are ample to accommodate carload customers. Inquiries of this type are invited.

### ADVISORY SERVICE

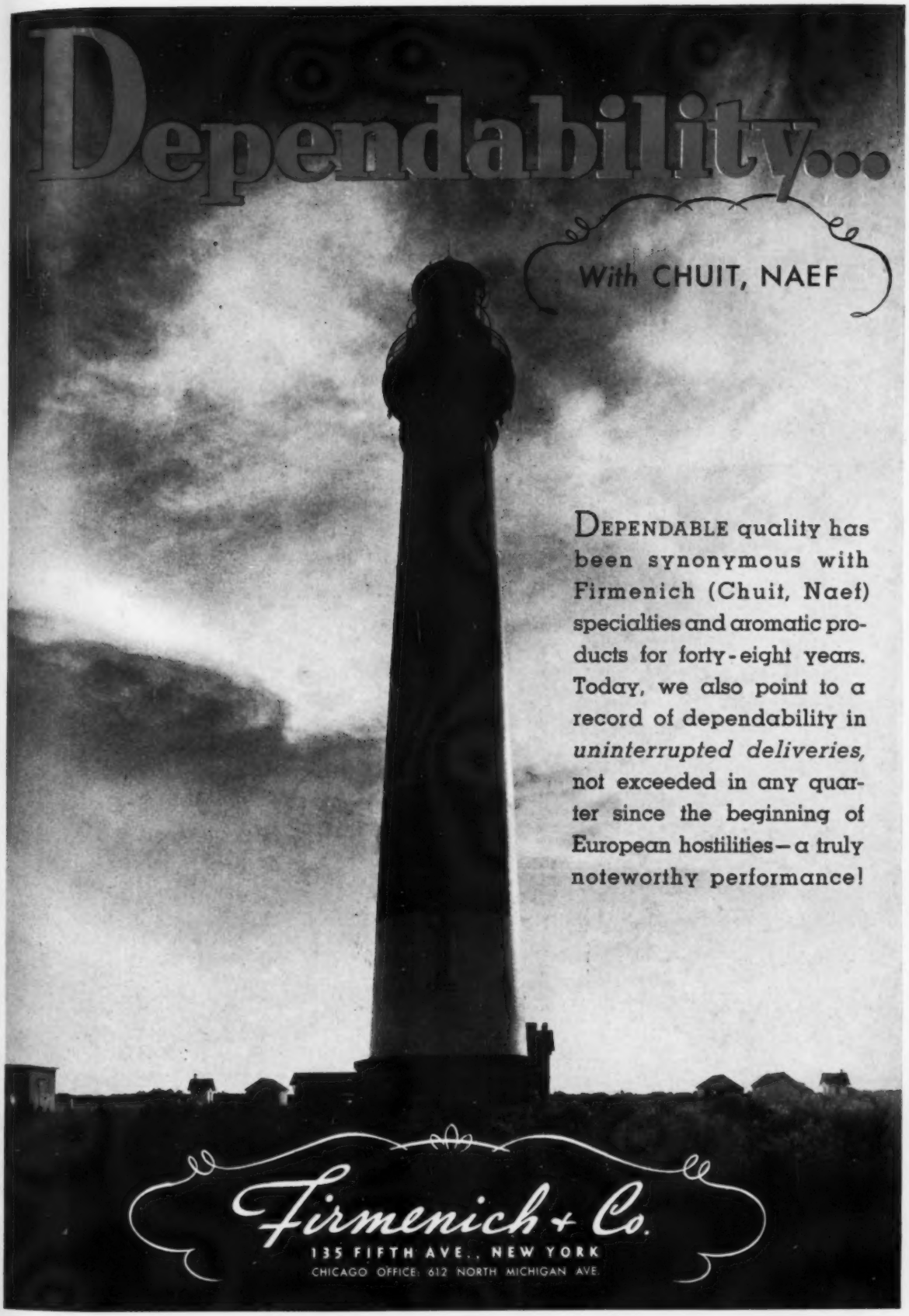
HOOKER advisory service—based on wide experience — is available to companies interested in learning how the addition of one or more atoms of hydrogen can change profoundly the value of a material.

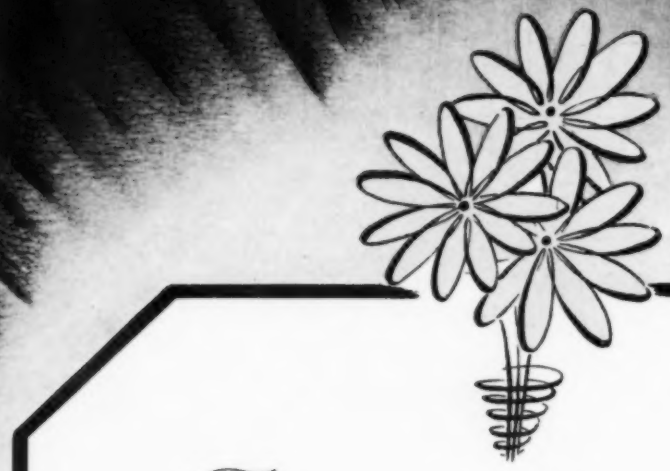
**HOOKER ELECTROCHEMICAL COMPANY**
**Buffalo Avenue and Union Street**
**NIAGARA FALLS, N. Y.**
Tacoma, Wash. • New York, N. Y. • Wilmington, Calif.

**Hooker**
CHEMICALS

ARMY (E) NAVY

5437


Dependability...
With CHUIT, NAEF
DEPENDABLE quality has been synonymous with Firmenich (Chuit, Naef) specialties and aromatic products for forty-eight years. Today, we also point to a record of dependability in *uninterrupted deliveries,* not exceeded in any quarter since the beginning of European hostilities—a truly noteworthy performance!
Firmenich + Co.
135 FIFTH AVE., NEW YORK
CHICAGO OFFICE: 612 NORTH MICHIGAN AVE.



*For over 145 years...*

THE D&O TRADEMARK HAS BEEN RECOGNIZED AS A SYMBOL OF CREATIVE ABILITY AND THE HIGHEST QUALITY STANDARDS IN THE FIELD OF AROMATICS AND ESSENTIAL OILS.

*We invite you to submit your perfuming problems to our competent compounding laboratories.*

D&O

ESTABLISHED 1798

DODGE & OLCOTT COMPANY 180 VARICK ST. • N. Y., BOSTON, CHICAGO, PHILADELPHIA, ST. LOUIS, LOS ANGELES • Plant & Labs., BAYONNE

HYSAN
Hysan IS NOW SHIPPING THE WORLD'S
FINEST LINE OF DEODORANT Blocks
HYSAN PRODUCTS
SANITARY CHEMICAL
Hysan

Norda

## *Synthetic floral oils . . .*

PRESENT reduced supplies of natural floral essences emphasize the value of high quality substitutes. Synthetic floral essences can be used to replace the natural oils with full satisfaction and marked success in numerous products,—toilet soaps, shampoos, shaving creams, powders, creams, and many others.

In fact, in many products the newer synthetic floral essences are to be *preferred* for the manner in which they reproduce the true fragrance of the living flowers in the finished product,—not to mention uniformity of quality and odor fidelity, and their economy under present conditions.

Let us tell you more about these Norda substitutes as an answer to the scarcity of natural floral oils.

# NORDA Essential Oil and Chemical Co., Inc.

*Chicago Office*
325 W. Huron St.

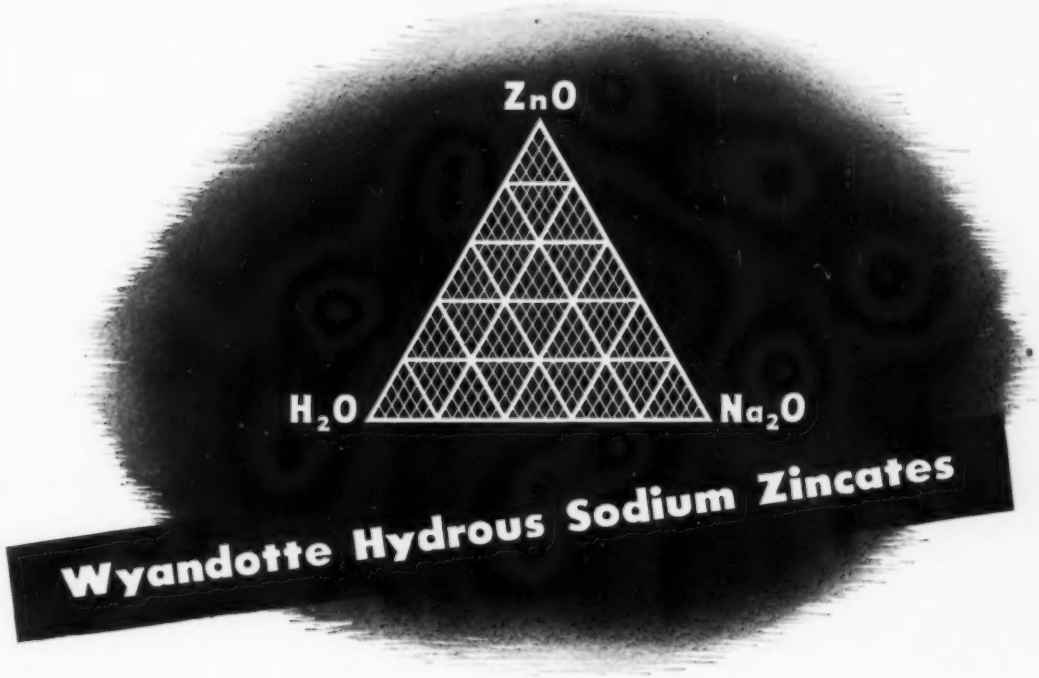
*Los Angeles Office*
2800 E. 11th Street

*St. Paul Office*
253 E. 4th St.

*Toronto Office*
119 Adelaide St., W.

*New York Office*
601 West 26th St.

*Montreal Office*
135 Commissioners St., W.




# CHEMICALS WITH *U. C. P.

After years of research and development by Wyandotte, laboratory samples of the various hydrous sodium zincates are available and commercial quantities of several of the zincates can be made available for important uses. All of the hydrous sodium zincates are potentially available in large quantities. Chemicals of "undiscovered commercial potential," they have promise of immediate important commercial functions, such as:

- **Purification of water supplies.**
- **Boiler water treatment.**
- **Clarification of cannery and other industrial waste waters.**
- **Basis for colloidal suspensions of zinc oxide or zinc hydroxide.**
- **Source of zinc in zinc-plating operations.**

Wyandotte Chemicals' technical staff is always ready to talk over with you the properties and applications of hydrous sodium zincates. Users of alkalies may find it profitable to investigate the possible benefits of these chemicals in their processes.

**Undiscovered commercial potential.*

# PROPERTIES OF HYDROUS SODIUM ZINCATES

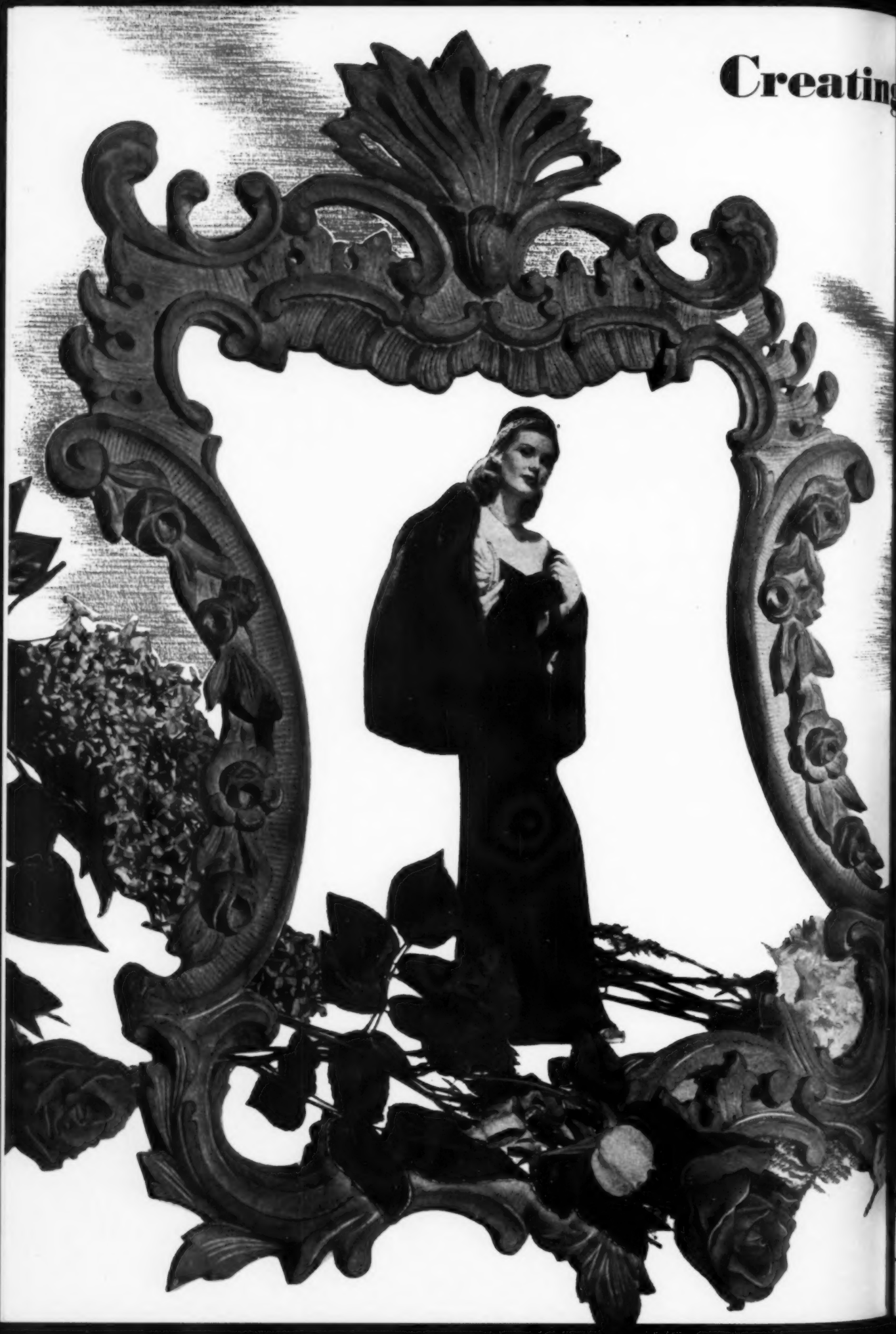
***CHARACTERISTICS:*** White to light gray or brown; flakes, granules or powder. The more alkaline zincates dissolve in water without decomposition but the less alkaline forms hydrolize to colloidal zinc hydroxide or oxide. All ratios may be dissolved without decomposition in suitable alkaline solutions. Solutions precipitate and flocculate traces of calcium, magnesium, iron and other metals from solution.

***RANGE OF COMPOSITIONS:*** $Na_2O$: ZnO ratios from 100:1 to 2:1. Combined water content approximately ½ zinc oxide content by weight.

**WYANDOTTE CHEMICALS CORPORATION • Michigan Alkali Division**
**WYANDOTTE, MICHIGAN** **OFFICES IN PRINCIPAL CITIES**

**Wyandotte**
REG. U. S. PAT. OFF.

**Soda Ash • Caustic Soda • Chlorine • Bicarbonate of Soda • Calcium Carbonate • Calcium Chloride • Dry Ice • Aromatic Intermediates • Hydrogen**


Creating

# Tomorrow's Masterpieces

## *with inspirations by* Givaudan

Producing toiletries and cosmetics that meet highly critical demands, without many of the materials heretofore considered indispensable, is an accomplishment of which the industry may well be proud. But the value of this accomplishment is more than temporary. It has brought to light many new materials—"replacements" and "alternates"—which not only help meet present needs but also broaden the scope and increase the efficiency of compounding. These new materials, together with tried and proven standbys that will return with the end of the war, provide a broad and fertile background for the creation of tomorrow's masterpieces.

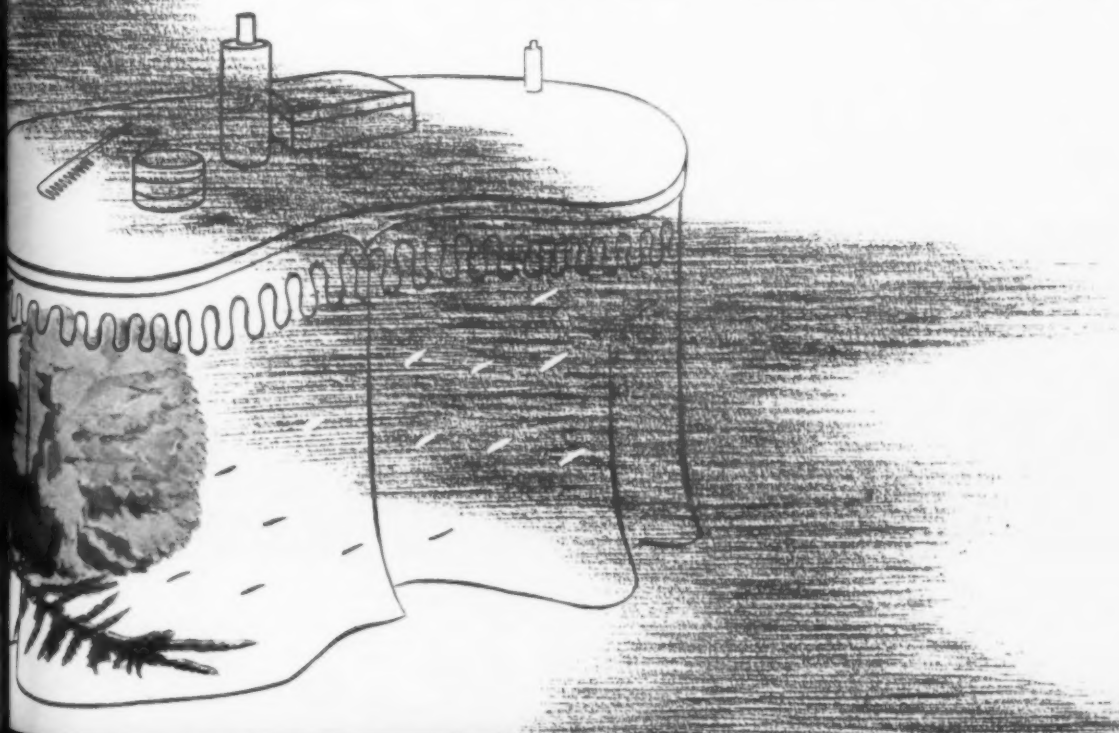
From Givaudan's research laboratories have come a good number of the new aromatic chemicals which are contributing to high quality and efficient, economical production. The experience gained in the development of these new chemicals can be of value to Givaudan customers in planning new products or improving old ones. We invite you to consult with our staff in giving reality to your post-war ideas.

**BUY WISELY...BUY GIVAUDAN**

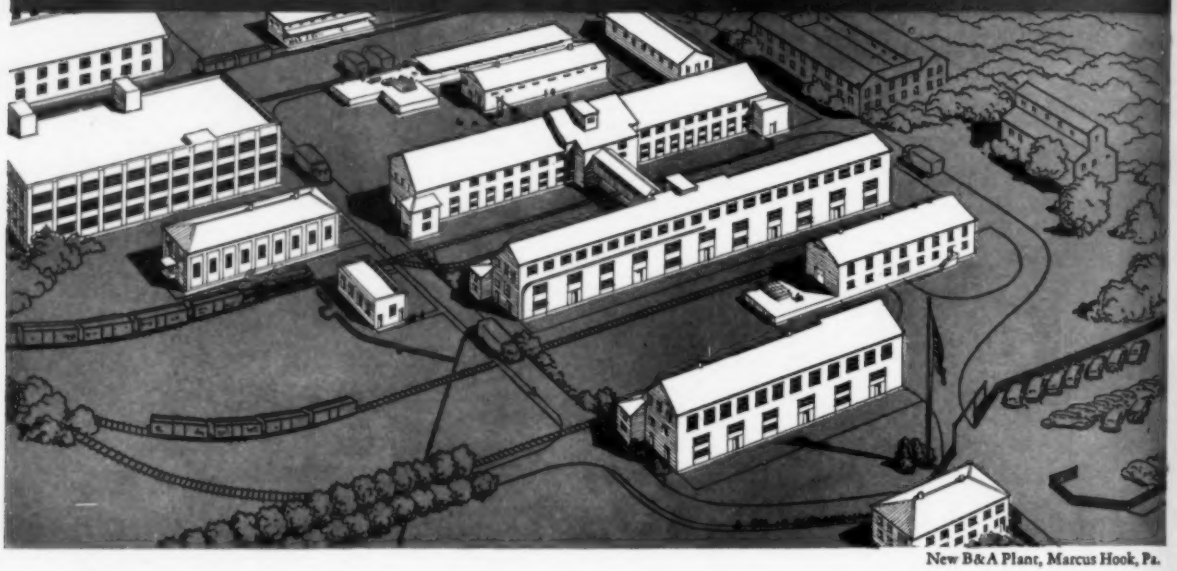
## *Givaudan-Delawanna, Inc.*

330 WEST 42nd STREET • NEW YORK 18, N. Y.

**OUR PLANT FACILITIES ARE AVAILABLE FOR ANY FURTHER CONTRIBUTION WE MAY MAKE TO PRODUCTION OF MATERIALS FOR THE WAR EFFORT**



# AGAIN *GENERAL CHEMICAL* CREATES NEW FACILITIES FOR BAKER & ADAMSON PRODUCTS TO SERVE AMERICAN INDUSTRY!



New B&A Plant, Marcus Hook, Pa.

THESE NEW FACILITIES for production of Baker & Adamson reagent and fine chemicals provide ideal manufacturing areas, additional research and development laboratories, and special storage and shipping accommodations. This plant's output, coupled with that of other Baker & Adamson producing units and distributing stations throughout the United States, marks another forward step in Baker & Adamson leadership.

Basic materials for many Baker & Adamson quality products made here come directly from sixteen of General Chemical Company's producing locations. With such fundamental sources of supply, including many Company-owned mines for raw materials, Baker & Adamson is in a pre-eminent and unique position for meeting the expanding uses of high-purity chemicals in industry.

Whether you require laboratory reagents, fine chemicals, or other products prepared in accordance with your formulae—avail yourself of the Baker & Adamson facilities. Experienced technical service representatives are ready to discuss *your* chemical problems and requirements. Baker & Adamson stocks are carried in many principal cities!

GENERAL CHEMICAL COMPANY

*Fine Chemicals for Industrial America*

GENERAL CHEMICAL COMPANY

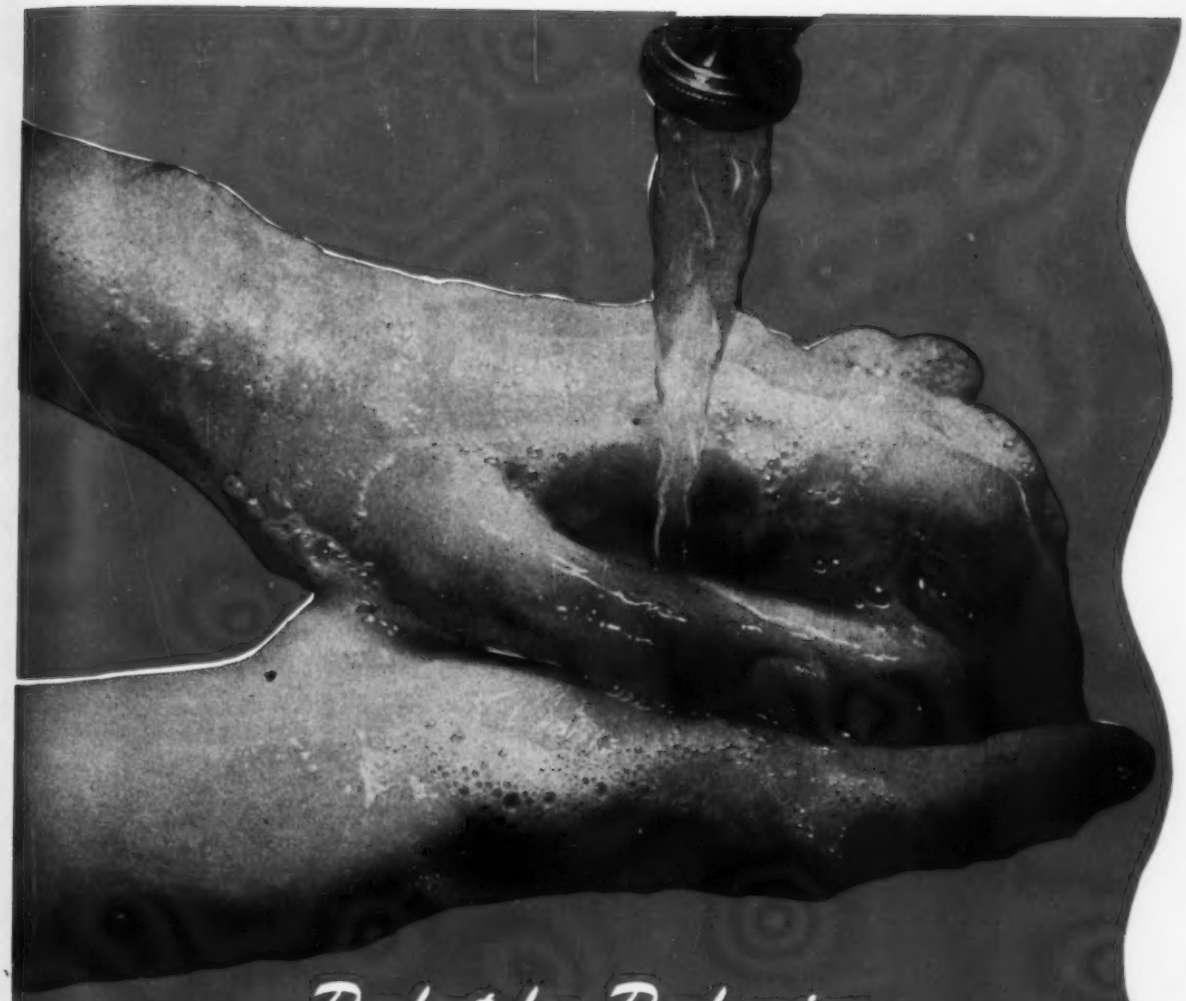
40 RECTOR STREET, NEW YORK 6, N. Y.

Technical Service Offices: Atlanta • Baltimore • Boston • Bridgeport (Conn.) • Buffalo • Charlotte (N.C.) Chicago • Cleveland • Denver • Detroit • Kansas City • Milwaukee • Minneapolis New York • Philadelphia • Pittsburgh • Providence (R.I.) • St. Louis • Utica (N.Y.)

Pacific Coast Technical Service Offices:

Los Angeles • San Francisco • Seattle • Wenatchee • Yakima (Wash.)

In Canada: The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver



*Perfect for Perfuming*

LAUNDRY SOAPS · WASHING POWDERS · LIQUID CLEANSERS · POLISHES, etc.

# JAVONELLA

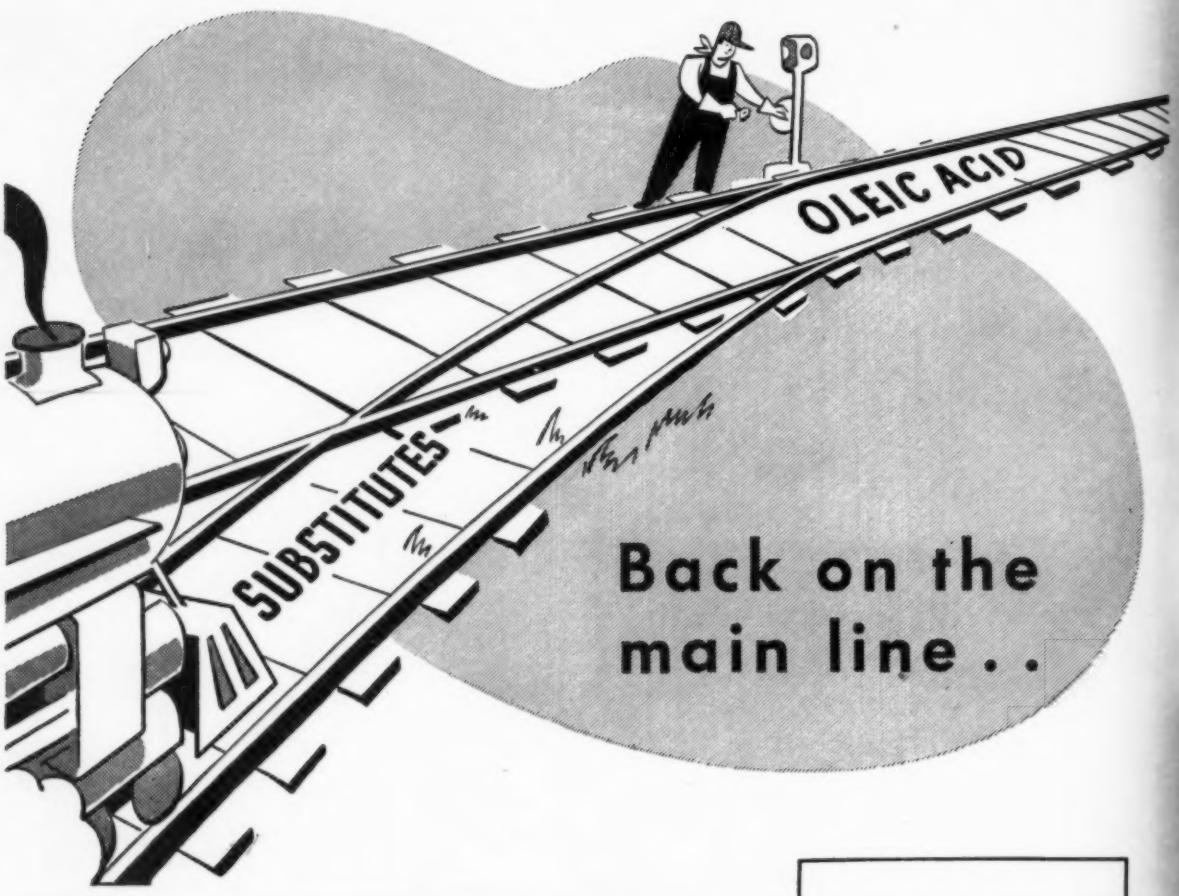
Even when Oil of Citronella was low in price and easy to obtain, JAVONELLA was a reliable favorite. A great many manufacturers preferred its finer, cleaner odor, its uniform quality and consistent economy. And now that Citronella is so high in price and difficult to get, JAVONELLA is more important to you than ever before.

*Write for Samples & Quotations*

**FELTON CHEMICAL COMPANY, INC.**

599 JOHNSON AVE., BROOKLYN, N. Y. · BRANCHES IN PRINCIPAL CITIES

MANUFACTURERS OF AROMATIC CHEMICALS, ESSENTIAL OILS, PERFUMES AND FLAVORS




As of April 1st, *all* red oil (oleic acid) has been removed from allocation, and our inventory position has improved to a point where we can make prompt shipment of all distilled and saponified grades of red oil.

We recommend Emery's red oil for oiling of raw wool stocks, and the scouring and fulling of fabrics, because of its advantages over other fats and fatty acids.

First, being entirely of animal origin and containing a minimum of highly unsaturated fatty acids, the development of a gummy film through oxidation is held to a minimum. And stocks lubricated with red oil give excellent results.

Second, the characteristics of textile soaps made from oleic acid can be controlled. They are uniform and free rinsing. In fact, the oil itself can be scoured off by boiling with a minimum quantity of mild alkalies . . . soda ash, for example.

Emery's red oils, both distilled and saponified, are available over a wide range of specifications. Let us know your problem, so that we can recommend a suitable grade and type. We will gladly send you samples on request.

**All red oil (oleic acid) off allocation**

It has just been announced by F.D.A. that, as of April 1st, *all* red oil can be sold subject only to the certification requirements of FDO 53 and/or FDO 87. These orders have to do with use and inventory control, but do not preclude your using red oil for any purpose after the 15th of each month.

LABORATORY-CONTROLLED THROUGHOUT PRODUCTION

**EMERY INDUSTRIES · INC.**

4300 CAREW TOWER · CINCINNATI 2, OHIO

New York Office: 3002 Woolworth Building, New York, New York · New England Office: 187 Perry Street, Lowell, Massachusetts

# Together...we have a stake in America

You are a manufacturer of cosmetics, perfumes and toiletries, visualizing in wide perspective the humming cities, thriving towns and fertile valleys of America as your market. You know that the continued favorable reception of your product depends above all on its intrinsic worth and appeal. Come war or peace, your high standards must remain fixed at the level of popular approval.

You among the many manufacturers whom we have served for years have found from the outset how well Florasynth *research* has interpreted your requirements . . . how well Florasynth *resources* aided in setting your standards . . . and how, under Florasynth *responsibility*— regardless of conditions — no effort was spared to maintain these standards.

You are our market directly . . . your market is ours, indirectly. Together, we have a stake in America!

*More than 30 years of amazingly successful reproduction of* ***Florasynthetics*** . . . JASMIN . . . BERGAMOT . . . LAVENDER *and others . . . Primary Essentials . . . Proved in Product Performance.*

*Florasynth* LABORATORIES, INC.

1513-1533 OLMSTEAD AVENUE, NEW YORK 61, N. Y.

CHICAGO • DALLAS • DETROIT • MEMPHIS • NEW ORLEANS • ST. LOUIS • SAN FRANCISCO • SEATTLE • LOS ANGELES

MONTREAL • TORONTO • VANCOUVER • WINNIPEG • MEXICO CITY

# "BEAMAX"

## DRIES TO A LUSTRE

# LIQUID WAX

## ADVANTAGES:

- Simple to Apply
- Dries quickly
- Requires No Polishing
- No Odor
- Long Wearing
- Easily maintained by dry or damp mopping
- For *all* Floors
- Water Resistant when dry
- Freezing Does Not Break the Emulsion
- Will Not Solidify in Storage
- Uniform Quality
- Surface Adherence
- Removability
- Coverage
- Stable Emulsion

*Meets Specification P-W-151a.*

**THE DAVIES-YOUNG SOAP CO.—DAYTON, OHIO**

From
BANGOR
to
BUENOS AIRES
Women from Bangor to Buenos Aires —and points between—may not understand each other's conversation, but fragrance needs no interpreter. Soap, delightfully perfumed, has universal feminine appeal. Our men who are masterly at this difficult job, have created *several hundred* outstanding soap odors that are yours to command.
VAN AMERINGEN-HAEBLER INC. • 315 FOURTH AVE., NEW YORK 10, N.Y.

# O. K. SOLDIER,

## YOU'RE GOOD AS NEW

Hundreds of thousands of yards of surgical adhesive tape are being used by our armed forces to top dress a hundred and one minor and major wounds, cuts, scratches.

Into the manufacture of this vast yardade of adhesive tape go great quantities of Lanolin USP. That's why Lanolin USP and other grades of Lanolin, Degras and Wool Grease have been placed on allocation . . . to make sure war needs are met first.

Some manufacturers have been asked to do without or with less Lanolin and Wool Grease so that it can be used for this and many other vital war purposes to help hasten the day of victory. The sooner it comes, the faster you can have all the Nimco Brand Lanolin, Degras and Wool Grease you want.

*Lanolin and Wool Greases Help Fight for Victory*

**BUY WAR BONDS**

*and support the fight*

MALMSTROM NIMCO BRAND LANOLIN

# N. I. MALMSTROM & CO.

America's Largest Suppliers of

**LANOLIN** • Anhydrous U.S.P. • Hydrous U.S.P. • Absorption Base • Technical

**DEGRAS** • Neutral and Common • Wool Greases

147 LOMBARDY STREET • BROOKLYN, NEW YORK

# Complete Selling Force

## AT YOUR DISPOSAL

An old established soap company is giving up the manufacturing end of its business, maintaining intact their experienced administrative and selling staffs. This organization is interested in representing you anywhere along the eastern seaboard, from Maine to Florida. Their long years of selling contacts, particularly among the wholesale grocery and janitor supply trade, should be of extreme value to you. They will handle anything in the cleaning supply line, from soap to a broom stick. If interested, get in touch with us at once. If you cannot handle any more business at the present time, our client is also interested in lines for the post-war period. However, it is most important that they study your proposition now, so that they can set themselves up accordingly. Should you prefer, they are also in a position to purchase large quantities of material for resale.

• WRITE AND LET US KNOW WHAT YOU HAVE TO OFFER •

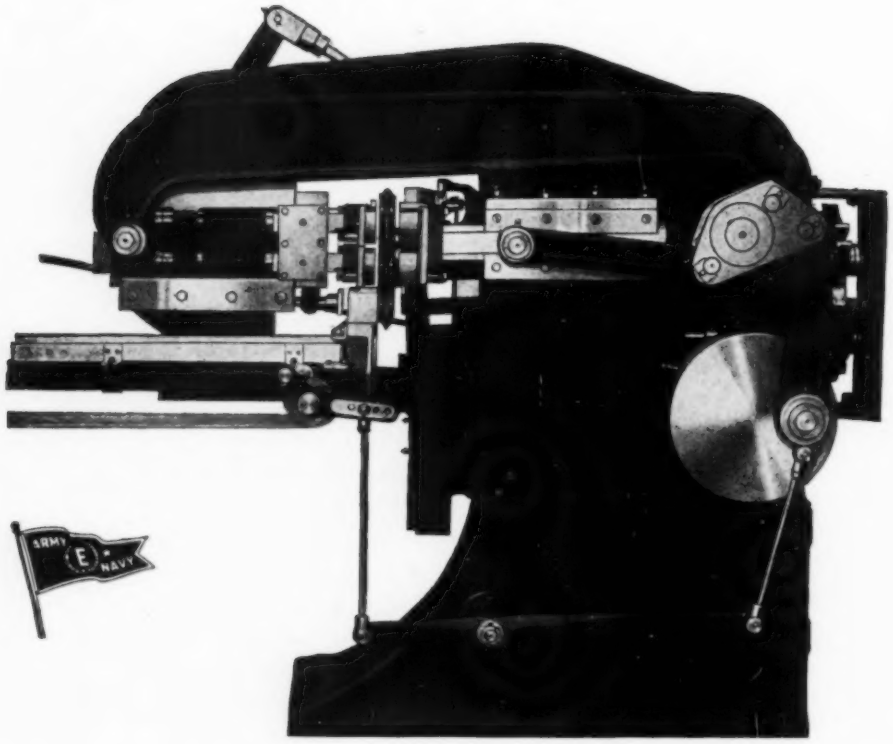
All correspondence between both parties must be kept strictly confidential.

NORMAN D. WATERS & ASSOCIATES, ADVERTISING, 1140 BROADWAY, N. Y. 1

# JONES TOGGLE PRESSES

## . . . laundry soaps too

### . . . sell better if they look better




TYPE K

**JONES SOAP PRESSES** insure for your laundry soap that finished appearance which connotes fine quality . . . turn out 90 to 140 cakes per minute . . . run to capacity by one operator . . . toggle operated, hence powerful, perfect pressing without noise or vibration . . . results and economies which you cannot obtain with presses of obsolete vintage . . . yes, sir—laundry soaps as well as fine toilet soap need the sales advantage of good looks . . . JONES modern toggle operated PRESSES are the answer.

The Standardized CONSTANT MOTION CARTONER packages bottles, jars, tins, collapsible tubes and many other articles. It feeds, folds, and inserts direction sheets and corrugated board liners with the loads.

## R. A. JONES & COMPANY, INC.

P. O. BOX 485 CINCINNATI, OHIO

# AS THE EDITOR SEES IT

THE present quota on oils and fats used in the manufacture of industrial soaps is 110 per cent of '40-'41. The quota figure for the general run of household soaps at present is 90 per cent. The object of WFA in setting this differential, we believe, was to make available for industrial uses, many of which are so closely tied up with the war effort, an ample supply of necessary soaps. Because many so-called industrial soaps are identical with products sold in the household market, chips, powders, spray products, a limitation on package sizes was established to set them apart. In short, any package of twenty-five pounds or larger can be classified as an industrial soap.

But so-called industrial soaps in twenty-five and thirty pound packages have been finding their way to the household market. Where a few years back, most buyers of household soaps might not have had either the money or the inclination to buy thirty pounds of laundry chips or powder at one lick, today they apparently have both. These "industrial" packages are reported selling well in the household field. That this is a rather obvious means of circumventing quota regulations, there is little doubt, although thus far the practice does not seem to have grown to serious proportions. Nevertheless, it appears to be one of those things which tend to invite further restrictions by WFA.

WHILE Rome burned, Nero fiddled. But Nero had nothing on the OPA in determining a price for returned shipping containers in the test collection for reuse in Chicago. While the OPA still fiddles around trying to make up its mind on the correct price for returned containers, those who might turn in such containers so that they could be returned to the manufacturers to be used again, are holding them back. The idea behind this is probably suggested by the hope of a higher price. As soon as the economists of OPA complete their apparently complicated figuring and set a price, these used containers should start moving back where they will be of some use as an aid in cutting down requirements for new boxes.

Just how successful this re-use plan is going to be, nobody knows. We have had our doubts, but until it is actually demonstrated on a practical basis, the doubts remain. If it has real value in saving paper board, the sooner this is confirmed, the better for everybody. The paper shortage is not something in the vague and distant future. It is here *now*.

THE enforced reduction in coconut oil allocations for the second quarter of 1944 is naturally a disappointment to many soapers who had looked forward hopefully to the possibility of an increase. To almost any soaper today, coconut oil is his key fat. He is willing to struggle along without various other raw materials, but he has come to rely on coconut oil as his mainstay, as the oil which makes his soap lather quickly and profusely, and which, above all, makes it sell. During the past year or two, he has known what it means to get along with a third or less of the pre-war quantities of coconut oil, and he appreciates now more than ever what it can do for a bar of soap.

When coconut oil allocations were increased for the first quarter of 1944, hopes

rose and the feeling spread that this was just the beginning of a return to full pre-war quantities for the soap kettle. Hence, the disappointment of the cut for the second quarter was keener than ever. But the cut was really no doing of WFA whose unpleasant duty it is to allocate coconut oil. Ships which had previously been used to transport coconut oil and copra to the United States were switched to other purposes more essential at the time to the war effort. Without ships, the coconut oil could not get here and WFA had considerably less to distribute among American soapers.

FOLLOWING the issuance of the WPB order a month ago restricting the use of paper board shipping containers to eighty per cent of 1942 use by the soap industry among others, the WPB was literally deluged with protests and appeals against the order. Among those who appealed were a large number of soapers. In fact, the soap industry is reported to have appealed practically *en masse*. And all of the appeals, both from soapers and others, are understood to have been made on a basis of hardship.

As had been pointed out before, the order came as a surprise and a shock to most soapers. That it can and will hamstring the economic distribution of a large tonnage of necessary soap if continued in effect, has also been pointed out previously. The soap industry simply cannot get its production to market under the conditions implied by the order, particularly in view of the cuts in paper board weights and over-all tonnage put into effect voluntarily two years ago during the 1942 base yearly period.

The belief has been expressed unofficially in Washington that soapers will be permitted to use enough containers to ship such tonnages as they are allowed to produce under current oil and fat quota figures even though these quantities exceed the eighty per cent figure. The quantities will be determined by WPB on individual appeals, it is understood, even though WPB is literally snowed under in this direction at the moment. We sincerely hope that this is the case, because otherwise the order will constitute one of the most effective road-blocks to essential soap distribution which the industry has seen in many a long year.

PROPONENTS of United States Government grade labeling intended eventually as a substitute for brand designations on consumer merchandise, are still diligently pursuing their work in Congress. For some years, there has been a number of so-called consumer groups who have constantly opposed the idea of nationally advertised brands as well as national advertising. Their expressed reasons for substituting grade labeling for brand names are well known and require no comment here. That their plan would wipe out incentive for quality maintenance and improvement seems quite apparent. Competition which has been responsible for so many wide product improvements would be essentially sidetracked. Once a product met the minimum specifications for any grade, why improve it further?

Whether the American consumer wants grade labeling or not, and such evidence that we have seen indicates that he does not —its crusading advocates intend to jam it down his throat. This type of attack calls for the same sort of defense by brand owners. Such opposition as is now being ushered in Congress cannot be too strong. Furthermore, it must continue indefinitely. Beaten once, twice or a dozen times, the grade label crowd will still fight on, mostly because they are organized professionals who earn their living—and a tidy one at that—crusading with their self-organized "consumer protective" leagues of one sort or another. When they quit crusading, their income dries up. So, they will never quit!

# RUG and UPHOLSTERY CLEANERS

RUG and upholstery cleaners, in the parlance of demonstrators, are "flash" items, and therein seems to lie the secret of their growing success. The beauty of this "flash" quality, that is, the ability to give a dramatic and convincing performance in the hands of a deft demonstrator, lies in its double-barreled sales result. An effective demonstration of a rug and upholstery cleaner sells the product itself, and, in addition, can be the springboard for the sales of other items, usually kindred products in a manufacturer's line of waxes, polishes, etc. The multiple sales idea, stemming from a demonstration of a rug or upholstery cleaner, works like this: the prospective customer entering the house furnishing department—of a department store—where the great bulk of rug and upholstery cleaners are sold—has his attention attracted, by the demonstrator, who gets the prospective customer's attention by offering to show how easily her rug and/or upholstery cleaner works.

The demonstrator — to whom nearly all cleaner manufacturers attribute a great share of the responsibility for the growing sales of their products—is usually a tall, good looking woman wearing a white frock coat, Characteristically a fast and/or loud, clear talker—reminiscent of the pitch man or carnival vendor, particularly in the chain or syndicate type store—the demonstrator is stationed at some "good spot" in a department where she can attract plenty of attention. In reality a salesperson, whose salary is paid by the manufacturer for whom she is demonstrating, the demonstrator earns between $45 and $75 a week depending upon her ability and the department where she is working. This may seem like considerable money for a manufacturer to have to lay out each week, but in reality, unless a demonstrator does earn that much, she isn't felt to be an efficient producer.

For the department or chain store in which the demonstrator is working, the set-up is very desirable. Since demonstrators, while concentrating on the promotion of a particular line of products, also sell other merchandise as well, the store is really subsidized by a manufacturer to the extent of a free salesperson. Of course, there are disadvantages to having a demonstrator from the store's point of view.

A demonstrator for rug and upholstery cleaners usually concentrates her efforts on the latter. She has, as part of her equipment, usually a chair pad covered with some light, cotton print that gets to be unbelieveably dirty. Using a small amount of whatever type cleaner she is promoting, the demonstrator quickly and thoroughly dissipates the dirt on the fabric by a few deft strokes with a cloth or sponge. It's a very convincing demonstration and thus establishes confidence on the part of the prospective customer in the demonstrator. From there on, the demonstrator has fairly easy sailing in promoting her line of waxes, polishes, all-purpose cleaners, polishing cloths, etc. Since these latter items are part of

a highly competitive market and lack the "flash" properties of the rug or upholstery cleaners, the cleaners make a nice "front" for them, from the merchandising standpoint, and help immeasurably to build up at "point of sale" what the Dept. of Commerce estimates to be an annual volume of 91 million dollars worth of waxes and polishes sold at retail.

Although the Dept. of Commerce figures show no breakdown for carpet, rug and upholstery cleaner figures, one reliable trade estimate was advanced that puts the annual dollar volume of these cleaners at retail as between ten and fifteen million dollars-plus. This figure may be somewhat off, and there are people in the trade who would take violent exception to it. It was arrived at in somewhat the following manner. In the annual directory issue of one of the trade journals for the house furnishing department, *House Furnishing Review*, there appeared recently a list of 116 names of manufacturers of "carpet, rug and upholstery cleaners." In addition to these, in a few stores in the metropolitan New York area alone were found twenty-odd additional products in this category. Since rug and upholstery cleaners are for the most part, made and sold locally, it may be assumed that there are dozens of other local products sold in other retail markets of which we are unaware. Even assuming a very modest average annual sales figure, it would seem probable that the two or three hundred products sold do an annual volume well over ten million dollars. The larger companies, those who distribute nationally would probably include: Carbona, heading the list; A. S. Boyle, O-Cedar; Socony-Vacuum; Du Pont; Mystic Foam; and J.N.T. following, but not necessarily in that order.

The authoritativeness of the ten million dollar figure is certainly open to question, as is borne out by the contradictory estimates as to the size of the market by manufacturers who are familiar with it. As a matter of fact, the majority of people questioned in connection with this survey refused to give any estimates whatsoever. They wouldn't even guess. One man, with a large organization, reported that his firm had asked an advertising agency to make a survey of the market. The agency, unable to make any headway in gathering facts reported that: "there are no reliable facts on consumer usage, nor is there any concurrence of opinion among the people who should know." However, two statements, both from large organizations, one a manufacturer and supplier of raw materials for carpet and upholstery cleaners, the other one of the oldest manufacturers of a nationally distributed product of this sort, that is, who is reported to have made a survey of this field, did concur in their estimate as to the approximate annual volume at retail. They favored the ten million dollar figure.

In addition to department stores, where rug, carpet and upholstery cleaners are sold in their largest volume in housewares or house furnishing and notion departments; and chain stores, such as five and ten cent to a dollar type retail outlets, some cleaners are also sold in hardware and chain food stores. The volume in the latter two is somewhat limited because of the lack of demonstration. Only moderately seasonal in sale, carpet, rug and upholstery cleaners sell well all year round, and are promoted in some radio and mostly newspaper and magazine type advertising.

RUG and upholstery cleaners fall into three general classifications. There are liquids, pastes and powders. The liquids fall into three groups: foam type; those which are used as liquids to moisten a cloth and are applied directly to the object to be cleaned, and concentrated varieties which are mixed with water and applied with dampened cloth. The second category, pastes, are mixed in quantities of water and applied by clean cloths, sponges, etc. The powders are of two varieties: those that are dissolved in water and those that are used directly in powder form. The powder types that are not to be dissolved are designed exclusively for rugs and carpets from which the powder can be taken up by a vacuum cleaner. Most of the other types, powder, paste and liquids are almost all triple purpose cleaners: for rugs, upholstery and carpets.

Judging by numbers alone, the liquid type cleaner would appear to be the most popular and probably is. Taking a random sample of the market in New York City, for instance, of thirty odd different types of products being sold in the larger department stores, twenty were liquids, three were pastes and seven were powders. Of the liquid type cleaners, half were of the foam type and the balance of the non-foam category. None of the pastes were of the foam type. One of the powders, out of the four kinds of powders that were to be dissolved in water and used in liquid form, was of the foam type. More than half of the products sampled, were clearly indicated for use on rugs and/or upholstery according to their labels. The remainder were either "all purpose cleaners," "dry cleaners," "fabric cleaners" or "cleaning fluid," and somewhere on their containers or labels specifically mentioned cleaning rugs, upholstery or carpets. This, with two minor exceptions, eliminated. for the purposes of this piece, spot removers, of which there are quite a wide variety.

Although synthetic detergents have been finding their way in increasing volume into this field, of the cleaners sampled for this article, only two: "Carbona" and "O-Cedar" rug and upholstery cleaner state on their labels or packages that they do not contain soap.

Like practically everyone else whose business is subject to the exigencies of war, the manufacturers of rug and upholstery cleaners have felt its pressures in various respects. They too were caught in the "squeeze" of more orders and less manpower, and fewer raw materials and containers. In some respects they have been harder hit than many other chemical specialty manufacturers since they have been competing directly with the Army, Navy, Marine Corps and other important war agencies for practically all of their chemical raw materials. Naturally, the rug and upholstery cleaners came off second best, which in this case was winner take all, loser nothing. Their synthetic non-inflammable sol-

vents were slapped under allocation control of varying degrees of rigidity. Among them, carbon tetrachloride, benzol, naphthalene, perchloroethylene, and trichloroethylene, all used widely by manufacturers of cleaning preparations, have been placed under allocation controls. Substitutes have been found with varying degrees of success, but the acuteness of the problem of raw materials and replacements has been given recognition by at least two large manufacturers. One, A. S. Boyle Co. of Jersey City, N. J., one of the oldest and best known national distributors in this field, has decided to give up its "Old English Foamy" upholstery cleaner for the duration. The company plans to concentrate on an all-purpose cleaner for which raw materials are more easily available.

Another rather well-known manufacturer encloses an explanatory folder with his rug and upholstery cleaners. The changes wrought by the war are explained as follows: "due to the war, certain materials used in the manufacture of (his product) have become unavailable and our supply is exhausted. However, after extensive research, we have developed substitutes that laboratory tests show to be equal in every way to our pre-war materials." The wartime (product) is described as differing in the following characteristics: (1) it is heavier—13 ounces to the ounce can, (2) it is slightly different in color and (3) it is slower to suds in cold water."

Du Pont's "Dry-Clean" is a replacement for "Tri-Clene," the raw materials for which as the label states "have been drafted for war purposes."

ANOTHER more obvious wartime change is in the packaging of many of these products. Turning from cans, the trend has been largely to glass for the liquids, and paper packages for the powders. The pastes have been in glass right along. One of the powder cleaners for rugs and carpets, "Powder-Kleen" is packaged in glass. "Mystic Foam" capitalized on the change-over by using a red "V" on their "victory label" on which was printed: "for the duration Mystic Foam will be packaged in glass to help save vital war materials." The change over to packaging in glass however, was not without headaches for manufacturers who used inflammable solvents in their product. The great majority however have gotten away from the use of inflammable materials. One product announces on the label that it "contains no ether or ammonia." Others contain soap, traces of which are visible in clear or semi-transparent solutions. The liquids, incidentally, are either clear,—cloudy white or green tinted.

Among the leading brands of rug, carpet and upholstery cleaners and their manufacturers are: "Carbona," Carbona Co., New York; "Mystic Foam," Mystic Foam Corp., Cleveland; "Foamclen," J.N.T. Mfg. Co., New York; "Powder-Kleen," Universal Utility Products, Detroit; "Whisk," Whisk Co., New York; "Dri-Kleen," Dri-Kleen Co., Chicago; "Barcolene," Barco Labs., Inc., Brooklyn; "Rad," Milrose Products Co., New York; "Murphy's Cleaner," Murphy-Phoenix Co., Cleveland; "Vapoo," Vapoo Products Co., New York; "Bluko," Cellowax Co., Baltimore; "O-Cedar's Upholstery and Rug Cleaner," O-Cedar Corp., Chicago; "S&S Cleaner," S&S Chem. Division, New York; "Afta," Afta Solvents Corp., New York; "Magicleaner," Magicleaner Corp., New York; "Renuzit," Radbill Oil Co., Philadelphia; "Rug-Spick," made for R. H. Macy & Co., New York; "Old English Foamy," distributed by A. S. Boyle Co., Jersey City, N. J.; Du Pont "Dry-Clean," "Brush Top Spot Remover," and "Tavern Rug Cleaner," Socony-Vacuum Oil Co., New York. In addition to these, many department and syndicate stores have brands carrying their own name. These and nationally known brands are also sold by department stores in fairly good volume through mail orders. While this is not a particularly profitable business from the store viewpoint, since mail and shipping charges run so high, it is valuable as a goodwill builder.

As to sectional preferences for rug and upholstery cleaners, it has been found that these products do not sell as well in the deep South and Southwestern sections of the country, and in those places near desert land, because these localities, particularly where homes are heated by natural gas, are freer of grime and dirt than the Northern and Northeastern sections of the country.

AS to the size of the rug and upholstery cleaner packages and their approximate price ranges, we find that the liquids run from half pints in bottles, retailing for about 35 cents to gallon jugs that have an approximate retail price of $1.50. Some of the liquids come in five gallon tins and retail around $3.95. The pastes range in size and price from approximately one pound six ounces, retailing for 50 cents, to ten pounds nine ounces retailing for $2.75. The powder span is three and a half ounces at 59 cents to two pounds for $1.25. Macy's however has its own product, three pounds for 94 cents. In general the powders that are mixed with liquids run higher in price than those that are used in powder form.

It may be noted that many of the rug and upholstery cleaners are of the foam type. It appears that the most successful cleaning can be accomplished by keeping the rug, carpet and upholstery being cleaned as dry as possible. Makers of non-foam liquid products advise using these materials with a cloth that has been rung out well or using very little of the liquid, so as not to wet the carpet or chair fabrics. The foam products are to be used as foam rather than in their original liquid form, the directions strongly urge.

Although all these products are sold as rug and upholstery cleaners, that is, for cleaning an entire piece of furniture or rug or carpet, as opposed to "spot cleaning," manufacturers themselves admit that to clean an entire rug or large piece of carpeting is quite a task. For this reason, the claim is put forward for many of the products that they don't "spot," or have similar undesirable properties. This "streaking" or "spotting" tendency that comes from the "spot" type cleaning, that is, cleaning just a small area of a piece of furniture or rug, has been largely

(*Turn to Page* 51)

# SOAP SUPPLY OUTLOOK


## By Dr. C. W. Lenth*

*Chief, Soap and Glycerine Division,*
*Food Distribution Administration*


WE ARE in a much better position this year than we were at this time last year with respect to prospective soap supplies. A year ago the production of soap fats had decreased to such an alarming extent that serious consideration was being given to soap rationing, and many soap manufacturers found themselves in the position of being unable to obtain enough fats to meet the quotas permitted them under the fat limitation order. As a result of the great increase in hog and cattle population last year and its slaughter this year, the soap fats situation has improved greatly. Unless something unforeseen occurs, we believe it will be possible to maintain the present level of soap production for the balance of 1944. As you know, the present level is equal to 90 per cent of the average 1940-41 level for packaged soaps and 110 per cent for bulk soaps.

Under the 90 per cent quota, the decline in soap inventories in the hands of retailers and manufacturers has been arrested and the hoarding of soap seems to be decreasing. Consequently, it is probable that, at the present level of production, household soap supplies will be adequate for civilian requirements.

The 110 per cent quota on industrial soaps has completely eliminated all complaints, and there is indication that some manufacturers are unable to sell their entire industrial soap quota. A factor in this situation, of course, is the inventory limitation on industrial soap consumers, since these consumers are not permitted to carry more than a 45-day supply.

Most of the potash soap makers are operating under the 110 per cent quota, and here again the prospects are better than they were a year ago. Limitations on the types of raw materials which may be used have been relaxed so that potash soap makers are no longer restricted to fatty acids. We also have relaxed the glycerine recovery order (FDO 33) to the extent that most of the potash soapers are not required to recover glycerine, so that it is possible for them to use castor oil and linseed oil without restriction, and they may obtain small quantities of soybean oil on application. A portion of the incentive to use fatty acids derived from foots has been removed by classifying foots in the same category as primary fats. As a result, the foots market is considerably easier than it was last year at this time. Therefore, it appears likely that the potash soap industry also should be in a position to maintain its current level of production for the rest of the year.

You may infer from these remarks that there are few restrictions remaining on the soap industry and that all serious difficulties are behind us. This, of course, is not the case. We are currently receiving requests for soap and edible fats for the relief of liberated areas in Europe, and they are of such magnitude that, if they were to be met in full from this country, a severe strain would be put on our supplies. Hence, it is necessary to retain FDO 42 in order to limit the use of fats to a reasonable level. It is this order that limits the use of fats by soap makers to 90 per cent of the base period for packaged goods, 110 per cent for bulk soap, and 150 per cent for mechanics' hand soap. Although these quotas seem generous to us, we are constantly receiving appeals from members of the industry for increases in their individual quotas and complaints from housewives on the soap shortage. Unfortunately, it is not possible to increase anyone's quota unless some very unusual circumstances made his particular base period production disproportionate from the standpoint of the industry average.

As a conservation measure, it has so far been necessary to retain the glycerine recovery order. Although we have been able to relax it, and hope to be able to relax it further, it still requires the recovery of glycerine by soapers who consume more than 150,000 pounds of fat in a calendar quarter. It has, however, been possible to suspend the order restricting the use of glycerine (FDO 34) during the present calendar quarter due to increased production and a simultaneous temporary recession of military requirements. It may seem inconsistent to require glycerine to be recovered and at the same time permit its unlimited use. In the first place, while we have enough temporarily for all uses, we cannot afford to waste any. In the second place, war requirements are expected to increase in the third quarter to such an extent that it may be necessary again to restrict its use for the less essential purposes. Consequently, it does not seem proper to revoke the order until the glycerine requirements become clarified.

In addition to these two orders, FDO 86 specifies the rosin content of various types of packaged soap, and imposes an inventory limitation on those who use soap in the course of their business operations.

*Before National Sanitary Supply Association, Chicago, Ill., April 25, 1944.

There has been some confusion among consumers and distributors of soap as to the meaning of the inventory limitation clause which contains two provisions. This clause states that no consumer may purchase soap if his inventory, including the quantity he is purchasing, will exceed a 45-day supply on the basis of his current rate of use. That provision is clear to most people, but there is considerable difficulty in understanding the other provision, which, in effect, is a small order exemption. It means simply that a consumer whose use of soap is less than one bulk package in 45 days is permitted to have an inventory of not more than two bulk packages. For example, a consumer who uses soap at the rate of one barrel in 60 days may buy two barrels, if he has no soap in his inventory at the time of purchase. If there is any soap in his inventory, he may buy only one barrel. If he bought more he would have on hand more than two bulk packages. We do not limit the size of bulk packages so long as they meet the definition of equaling or exceeding 25 pounds. This inventory limitation applies to soap in the aggregate owned and used by the consumer. If the consumer uses two types of soap he must balance his inventory of each type so that his total inventory does not exceed a 45-day supply. In some instances this is not readily possible and we have granted special exemptions to a number of consumers permitting them to calculate their inventories on each type of soap separately.

There are a number of other points in connection with the soap order which have been questioned from time to time, and on the basis of these, a series of questions and answers has been prepared. It may be worthwhile to review them at this time.

# Questions and Answers

1. Q.—Does everyone who purchases soap have to sign a certificate as provided in the order?

A.—Yes—all those engaged in business operations. Exceptions are non-profit organizations, such as hospitals, municipal, county, state or Federal governments, etc.—they are not required to sign certificates and are not held down on their inventories. Also no certificate is required on sales of less than one bulk package or case package of soap—presumably a retail purchase. No certificate is required for sales to jobbers, wholesalers and distributors.

2. Q.—Is it necessary for a soap converter to furnish an inventory certificate to his source of supply?

A.—Yes.

3. Q.—Should one require an inventory certificate in connection with a sale for export?

A.—Certificates are not required in connection with sales of soap to jobbers or brokers who acquire such soap for resale, Also, it would not be necessary, as a seller of soap to a foreign corporation, to obtain an inventory certificate since the provisions of FDO 86 apply only to the forty-eight states of the United States and the District of Columbia.

4. Q.—Is it necessary for customers to forward a certificate with every order?

A.—Yes. It is not proper to consider one certificate as covering a number of orders from a given customer. A permanent certificate obviously is meaningless, since no one can certify today what his inventory will be a month from now. In order to reduce paper work, we suggest that you stamp or type on your delivery tickets the required certificate so that when the receipt of the shipment is signed, the certificate can be signed simultaneously with no additional paper.

5. Q.—Is it permissible to accept a certificate covering future orders?

A.—No, since FDO 86 clearly states that a certificate must accompany each order of soap.

6. Q.—Is it necessary to obtain certificates under FDO 86 covering purchases of soap by farmers?

A.—Since paragraph (e) of this order limits the requirement that a certificate be obtained from persons who use bulk soap in their business operations, and since the soap will not be used by the farmer in his business operations, it appears that he is not required to furnish a certificate, nor is he covered by the inventory restrictions.

7. Q.—Are sulphonated oils considered soap for the purposes of FDO 86?

A.—No.

8. Q.—What is the status under FDO 86 of dry cleaning soaps?

A.—Since dry cleaning soaps are not water soluble products, they are not subject to the restrictions of Order FDO 86.

9. Q.—Is cake soap for towel suppliers included in the inventory restrictions?

A.—No. Towel suppliers are in effect distributors of soap, and hence are not controlled by the order in this portion of their business. The inventory restriction, of course, applies to any soap used by these companies in their own business operations.

10. Q.—Must an inventory compliance certificate be obtained for each delivery of soap subject to the inventory restrictions of FDO 86?

A.—No. If delivery is specified on several different dates, the purchaser may certify once to cover the entire order provided he is sure that delivery on the dates specified will not result in his having more than a 45-day inventory.

11. Q.—Are wholesalers, retailers, jobbers, agents and others who buy soap in bulk packages and full cases for resale required to certify under the inventory restriction?

A.—No. The inventory restriction applies only to purchasers of bulk packages and full cases for actual *use*.

12. Q.—Do the inventory restrictions apply to—

(a) Soap in the aggregate, or to soap by kinds or brands?

(b) Soap for processing textiles?

(c) Soap for non-detergent purposes?

(d) Bar toilet soap?

(e) Soap delivered to city, county and State institutions (hospitals, schools, libraries, jails, etc.)?

(f) Soap delivered to religious organizations?

(g) Soap delivered to private educational institutions?

(h) Soap delivered to private hospitals?

A.—(a) They apply to soap in aggregate.

(b) Yes.

(c) Yes.

(d) Yes, when sold in case lots for use (not resale).

(e, f, g, h) Non-profit organizations such as Federal, State, county, municipal, charitable, religious, medical, and educational institutions are not required to make inventory certifications under the order, since these are not considered as being engaged in "business operations." (Medical, educational, and other institutions operated for profit must certify.)

13. Q.—Can the 45-day inventory restriction on soap be considered to mean that "no buyer shall purchase at one time more than a 45-day supply?"

A.—No. It means that the inventory, in the aggregate, must not be more than a 45-day supply (at the current rate of use) after receipt of any purchase of soap in full cases or bulk packages. Where a single bulk package or case is equal to more than a 45-day supply, the total supply after receipt of a soap order must not be greater than two bulk packages or cases.

14. Q.—What is the meaning of the term "unit package" as used in the order in connection with the definitions of "packaged soap" and "bulk package?"

A.—"Unit package" means the smallest production unit. For example, a unit package would be a single bar of soap or a single carton of packaged soap. Such bars or packages ordinarily are packed in a shipping container more than one package or bar cannot be considered a "unit package."

15. Q.—Are soap distributors required to obtain certificates from customers on sales less than one "bulk package" or one case of "packaged soap"?

A.—No. No certificate is required for sales less than one "bulk package" or one case of "packaged soap." (This assumes delivery will not result in the user having more than a 45-day inventory. Such sales are presumably retail sales.)

16. Q.—Do all soap products *regardless* of the percentage of soap content come under the provision of this order?

A.—Yes.

17. Q.—Does FDO 86 restrict a user to the same size package he formerly purchased?

A.—No.

18. Q.—Where a user buys soap from more than one supplier, is it his responsibility or the suppliers' to comply with the inventory restrictions?

A.—The responsibility rests with the user. He must certify to each supplier that the quantity of soap he is accepting will not cause his inventory to exceed the applicable inventory restrictions.

19. Q.—Under a central purchasing system are all plants or individually located distribution units of a manufacturer considered as a single unit?

A.—Yes. "Person" means any individual, partnership, association, business trust, corporation; or any organized group of persons whether incorporated or not. However, where a hardship will be created, an appeal may be directed to Washington asking for each plant or distribution unit to be ruled a "person" for the purpose of the order.

20. Q.—Who is to determine that a hospital is a non-profit organization?

A.—The tax authorities have already ruled on any such organizations, because if they are non-profit, they have certain tax exemptions.

21. Q.—Who supplies the certificates? Where do we get them?

A.—Copy it out of the order and have it reproduced.

22. Q.—Does this order apply if a converter has a use of fats and oils which does not exceed 10,000 pounds during a three-month period?

A.—Yes.

23. Q.—With reference to standing orders, has there been any interpretation allowing one certificate to cover standing orders?

A.—If it is a standing order or firm contract, one certificate is sufficient. If it is an open contract, or gentleman's agreement, a certificate is needed with each delivery.

24. Q.—If I took an order from a customer for a 90-day period and spread the deliveries so that they did not exceed a 45-day inventory, could I include the certificate on the order showing the dates of delivery and eliminate the necessity of getting a certificate each time a delivery is made that applies against the contract order?

A.—Yes.

25. Q.—If I am making daily deliveries to a converter, are they covered by the order?

A.—Yes.

26. Q.—Are all non-profit organizations exempt from furnishing a certificate?

A.—Yes.

27. Q.—If I understand your interpretation correctly, a certificate rightfully should accompany an order, but we get a good number of telephone orders during the day and it would be difficult to have a salesman get a certificate prior to delivery. Would it be O.K. to simply stamp the certificate on our receipt or shipping bill and have the customer sign it when delivery is made?

A.—Yes.

28. Q.—Are synthetic soaps affected by FDO 86?

A.—No.

29. Q.—Is it true that any product containing any percentage of soap is considered soap?

A.—Yes.

30. Q.—Many scouring powders contain soap, do they need a certificate?

A.—Yes.

31. Q.—Do shaving creams come under this order?

A.—Yes.

32. Q.—The certificate provides that delivery will not cause the inventory to exceed a 45-day supply, or two bulk packages or cases of packaged soap. In case of an oil company that has many service stations, the orders from the individual stations are collected and sent in direct from a central point. The deliveries are made to the individual station, probably one or two barrel lots. Is one certificate required or is the individual station considered the purchaser?

A.—Where there is a central purchasing agency, a 45-day inventory would be applicable rather than the two bulk package provision. However, we are willing to consider exemptions where the central purchasing agency places an order for a number of plants, whereby each plant could be handled separately. This requires an appeal to Washington.

33. Q.—There are a number of companies that make pick-ups of salvage material, and soap, as a medium of exchange, is used for payment.

A.—They are delivering soap and are required to obtain a certificate.

34. Q.—What about the manufacturer selling a finished soap to the pick-up companies?

A.—A manufacturer who sells to a pick-up organization simply distributes soap. However, the pick-up organization has to get certificates from his customers if deliveries amount to one bulk package or case of package soap, or if with the delivery the inventory exceeds a 45-day supply of soap in the aggregate.

35. Q.—Does the order affect the housewife?

A.—No.

36. Q.—We are selling hand soap in cases and making distribution to factories for resale to employees. Is a certificate required?

A.—No certificate. But if the factory itself buys soap and gives it to the employees, the inventory restriction applies and a certificate is required.

37. Q.—Where a converter buys from two manufacturers, is it his responsibility or the manufacturer's to comply with the inventory limitation?

A.—The responsibility is on the converter. He has to certify to both of the manufacturers that the soap he has accepted will not cause his inventory to exceed a 45-day supply.

38. Q.—If a customer certifies that delivery does not exceed a 45-day supply, are we supposed to follow it up?

A.—The order says you are to refuse delivery if you have reason to believe the certification is false.

## Jasspon Oils and Fats Chief

William H. Jasspon, president of Perkins Oil Co., Memphis, Tenn., and currently director of the oilseeds division of the Commodity Credit Corp., will assume the additional duties of chief of the Fats and Oils Branch, Office of Distribution, succeeding Leon Falk, Jr., who retired recently to return to private business in Pittsburgh, Pa., the War Food Administration announced Apr. 22. This move brings all the fats and oil functions of the War Food Administration under a single administrator. Mr. Jasspon has been in the oilseeds processing business since 1907, and came to the CCC in July, 1942. In the intervening time he has been consultant and director of its oilseeds processing program. President of Perkins Oil Co., Mr. Jasspon is vice chairman of the research committee of the National Cotton Council, and a member of the foreign trade committee of the U. S. Chamber of Commerce.

## Disinfectant Paste

A disinfectant paste contains aliphatic alcohols, a quaternary ammonium salt, and polymeric ethylene oxide. L. Schutz and E. Gottsacker, to I. G. Farbenind. A.-G. German Patent No. 731,718.

# OIL DECOLORIZING...

## The use of active carbons particularly in bleaching coconut oil. but also some tallows and greases*

**By John P. Harris**

*Industrial Chemical Sales Division*
*West Va. Pulp & Paper Co.*

SINCE the usual fatty oil refining operation removes many of the compounds that are ordinarily also removed by treatment with active carbon, the carbon treatment is usually applied after refining. Another reason for applying carbon after refining is because carbon is generally used to remove color, and the pigments are more readily absorbed after the free fatty acids have been removed. Based on Lovibond measurements, carbons appear more effective on reds than yellows. Carbons are particularly effective on greens, and their use will often prevent a green color during vacuum deodorization.

Carbon is so generally considered for color removal that other valuable properties are overlooked. Active carbons are of benefit in removing substances from an oil which have detrimental influences on many catalysts, particularly those used in hydrogenation. Carbons are also effective for removing peroxide bodies and substances which cause an oil to give a positive **Kreis test.**

Consideration here is given to those oils which are best treated with active carbon only, without resorting to the use of other adsorbents, such as fullers earth, activated clays, and the like. This is in direct contrast to treatment of such other oils as contain color bodies which are removed more economically and effectively by a combination of active carbon with other adsorbents. Some of the fats and oils which are more economically treated with active carbon alone are pure lard, rendered pork fat, edible tallow, white grease, some lard oils, stearines, light marine oils, as well as coconut and palm kernel oils.

It should be noted that all the above oils and fats when ready for the decolorizing process are of fairly light color, and that the predominant color bodies to be removed are red, green and blue, with a notable absence of yellow and brown such as is found in cottonseed, soya bean, and some other oils. Since it is well known that all adsorbents are extremely selective in action, it will thus be apparent that the colors which are most easily and effectively removed from vegetable and animal oils by active carbons appear to be red, green and blue, while yellow and browns are resistant to adsorption by carbons.

Normally a large tonnage of coconut oil is imported because it possesses characteristics which make it difficult to replace with other oils. Copra is quite white when fresh and where properly dried and freshly pressed, the resultant oil is so white and neutral that it has sometimes been marketed as a "virgin oil" without bothering to neutralize the very low free fatty acids in the oil, or to remove what little reddish color it contains.

But every day that passes between harvesting the copra and drying and pressing it, causes decomposition of the copra, and the pressed or extracted oil. This decomposition of the oil causes splitting of the whole fat marked by development of the free fatty acids to as high as 5, 7 or even 10 per cent, and it is also marked by development of an increasing red color and off odor in the oil, so that a fairly high dosage of adsorbent is sometimes necessary to remove the color and modify the odor in order that the oil will respond properly to deodorization by distillation with high temperature steam under high vacuum.

Active carbon alone in quite low dosage (i.e., below 1 per cent), frequently satisfactorily removes all of the color from a good quality of neutralized coconut oil. In case of high acid or "off" oil, including that produced from smoke dried copra, a considerably higher dosage may be found desirable. Since active carbon alone removes all of the color and foreign odor from coconut oil, it is generally a mistake to add other adsorbents to the active carbon for decolorizing, as (1) they add nothing in decolorizing, (2) they may tend to oxidize the oil leading toward destabilizing, (3) they increase the oil retention loss during decolorizing.

In case quicker or easier filtration is desired, it is sometimes satisfactory to precoat the filter press with some good grade of filter aid, but that is as far as use of material other than active carbon should go. Many good refiners find it possible to operate without the use of any filter aid. It should be remembered that the filter aid adds no decolorizing power and is used to assist filtration only.

Other oils, such as palm kernel oil, etc., are so similar to coconut oil in composition and in handling that it is unnecessary to deal with them separately. What has been said of decolorizing

* Based on discussion in a new booklet by the author. "Active Carbon for Decolorizing and Deodorizing Oils, Fats and Related Products,"—by special permission.

coconut oil is true of these oils as well.

Consider the more highly colored tallows and greases. These include yellow and brown grease and their stearines, No. 2 lard oil, No. 2 tallow, etc. Generally the high color of these fats is due to contamination during rendering and to decomposition, which raises the free fatty acids quite high. Activated clays or natural fullers earth with about ¼ to 1/10 its weight of active carbon at relatively high temperature produces a much cleaner as well as a better colored fat for soap and allied purposes.

One of the major benefits of treating inedible greases and tallows is that the M.I.U. is sharply reduced and that the grease and tallow can be safely stored in tanks or barrels without darkening or increasing in free fatty acid content.

In addition to these oils and fats, there is an additional borderline group of oils which includes peanut oil, castor oil, corn oil, palm oil, sesame oil, etc. These latter oils when in a prime or choice condition may best be treated with active carbon only, but when in an off condition may require the addition of other adsorbents to remove additional color bodies, which have developed during decomposition of the nuts, germ, seed or beans from which they are extracted.

THE application of active carbon to vegetable oils and fats involves mixing thoroughly with the oil and removing the carbon and adsorbed impurities by filtration. Necessary equipment consists of a mixing tank, pump, filter press, and storage tank.

*Mixing Tank*: The oil or fat is first delivered to the mixing tank where it is heated to the optimum temperature for decolorization. To accomplish this heating the mixing tanks are equipped with closed steam coils. As soon as the proper temperature is reached the active carbon is added. If bleaching clay or fullers earth are to be used, they are added at the same time. The mixture is then agitated thoroughly to assure intimate contact of the impurities with the adsorptive surfaces of the carbon. Mechanical agitation is preferred and should be fairly rapid to reduce the time required for contact, yet not so violent as to cause splashing or appreciable whirlpool effects. Opportunity for air to contact the oil should be reduced to a minimum, and therefore, some refiners employ mixing tanks equipped with vacuum. After 15 minutes to an hour agitation, depending upon efficiency of the equipment, the oil is ready to be pumped to the filter press.

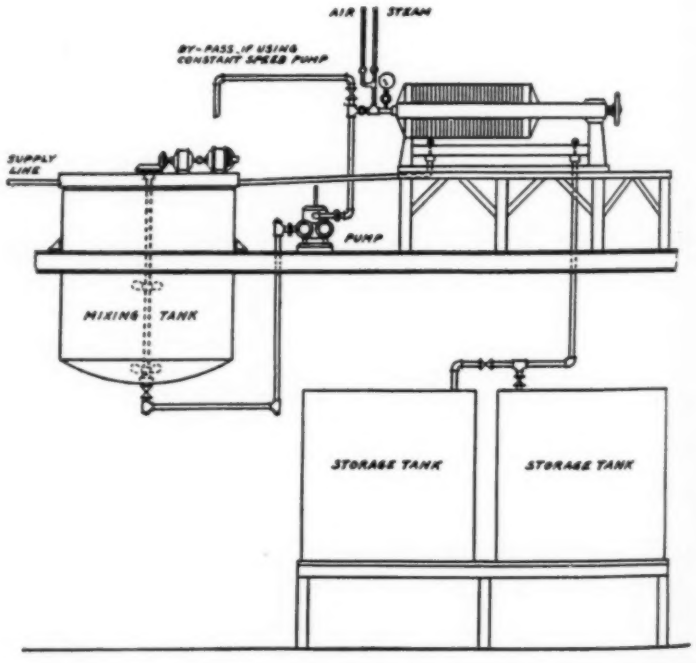
*Pump*: In deciding upon the type of pump to use it must be remembered that not only oil, but also fine particles of carbon and clay will pass through the impelling mechanism. Therefore, close meshing impellers such as in gear pumps should be avoided. Centrifugal or duplex type pumps have been quite successful in practice. A by-pass line should be provided in order to maintain pressures best suited for an efficient filtration cycle. Pressures on the filter should start low, and build up gradually to assure longer filtering cycles thus reducing labor costs for cleaning filters.

*Filter Press*: The type of filter commonly used for oils and fats are plate and frame and recessed plate, open-delivery filter presses. The filtering material employed is usually a special quality of duck filter cloth. Filter paper is also used to secure complete clarity quickly. When filter cloth alone is used, some particles of clay and carbon will pass through the filter during the early part of the filtration cycle until such time as a suitable mat is built up on the cloth. The filter should, therefore, be equipped so that the oil can be returned to the mixing tank when necessary. As soon as examination shows that the oil is coming through clear, the return line can be closed and the oil run direct to storage.

To minimize oxidation of oil during filtration, a closed delivery filter press equipped with sight glasses, is sometimes used. In any case, splashing of the oil into the trough should be eliminated to obviate picking up oxygen from the air.

After the filtering cycle is completed, the cake of carbon and clay in the filter will contain a certain amount of oil which can be reclaimed by blow-

(*Continued on Page 70*)




*Typical plant installation for decolorizing of oils by use of activated carbon. The mixer should be equipped with closed steam coils. Centrifugal or duplex type pumps are commonly used. The filter should be so equipped that oil can be returned readily to the mixing tank should it be necessary.*

# THE WAY IT LOOKS IN Washington

by

**C. H. JENKINS**

GENERALLY speaking, things have quieted down on the Washington front during the past month. But no sooner has the soap industry recovered from the first shock of the 80 per cent shipping container order under L-317 of a month ago, than rumblings of a further restriction on the use of paper products are heard in the direction of WPB. The paper board and carton outlook is not rosy. In fact, it shows signs of becoming worse and a further cut is a distinct possibility. And on top of the gloomy outlook in paper board, word is about that much of the optimism in regard to the metal container situation is to a considerable extent based on false hopes. Steel for containers is not going to be as free as expected a month or so ago. At the same time, the glass industry is indicated to be oversold about 11 per cent on all types of containers at the moment. In short, the outlook for the over-all container situation has deteriorated since April first.

**Container Protests Mount**

A short month after the new container limitation order, L-317, went into effect, Washington reports indicated that appeals were being received by the hundreds from container users who insist that they cannot continue to operate under the quotas established in that order. Officials in charge of enforcement of the new order seemed surprised at the volume of protests (it was reported over five hundred were filed in the first month) in spite of advance warning from many of the industries affected that the new restrictions were in many cases too drastic. So many procedural problems have arisen in handling the heavy barrage of appeals, that a completely new appeals policy is reported being formulated. Those filing early appeals had been asked to answer a long questionnaire on container use, but as the number of appeals continued to grow it was reported that the questionnaires were to be discontinued. It is reported that a new committee has been named in the Paper Division of WPB to try to straighten out the appeal problem.

A substantial number of appeals were reported to have been filed by soap makers, many of whom have indicated that it would be a practical impossibility to ship in their permitted quotas of shipping containers the quantities of soap they are permitted to manufacture under FDA regulations. There seems to be no indication yet as to what action may be taken by WPB on the soapers' container appeals. Strong protests have also been filed with WPB by manufacturers of dentifrices who have been asking for a higher priority rating on their shipping container purchases than AA-5. A task committee of the Toiletries and Cosmetics Industry Advisory Committee has been appointed to report to WPB on recommendations for conserving paper board. Serving on this committee are: Manning O'Connor of Colgate-Palmolive-Peet Co., Joseph Danilek of Dorothy Gray, Jule Gordon of Nestle-Lemur and Dr. Ralph L. Evans of Ralph L. Evans Associates.

**Container Inventory Rules**

Inventory regulations applicable to new fibre shipping containers were issued April 13 by the War Production Board. Purchase of new fibre shipping containers is limited to permitted inventory under L-317 or to "practicable minimum working inventory" as defined under Priorities Regulation 1, whichever is less.

It is prohibited to place orders for more new fibre containers than may be received under inventory regulations. Orders calling for delivery in installments may be placed, if all installments can be accepted within inventory limitations at the time specified by the purchase order. But regulations are violated if the purchaser places orders for more containers than he reasonably expects the condition of his inventory will permit him to accept at the time specified on his purchase order. Intent to cancel or reduce some orders does not permit a purchaser to place excessive orders.

**Container Re-use Program Starts**

The soap industry's test campaign on reclaiming soap shipping containers got under way in the Chicago area last month. Initial results are said to be encouraging, although something less than the full cooperation of the large chain organizations

is the best that has been received so far. Without their complete cooperation, of course, the plan cannot hope to achieve maximum results. One thing holding up operations at the moment is reported to be the delay in release by the OPA of its price ceilings on used containers. With uncertainty prevailing as to what these prices may be, and with no ceiling applicable until the OPA order is released, sellers are reported to be backward about parting with their used containers except at relatively high figures.

### Fat Outlook Improves

In oils and fats, the situation as far as the soap industry is concerned continues to show the benefits of careful and well-organized planning. With the exception of coconut oil, there is improvement,—and when the situation in oils and fats a year ago is considered, that improvement is wide. Obviously, WFA feels much better satisfied with conditions today than at any time during the past 18 months. But for the second quarter of 1944, allocations of coconut oil to soapers have been cut about one-third as compared with the 45,000,000 pounds of the first quarter. Loss of cargo space for carrying coconut oil and copra as a result of switching ships to other purposes is responsible for the enforced reduction. With the babassu situation in Brazil beclouded by talk of abrogation of the contract for shipment of all Brazilian babassu oil and kernels to the United States, the coconut reduction comes at an unfortunate time. In a natural effort to obtain higher prices for babassu oil, Brazil has been shipping to near-by South American countries. The American State Department is now in the picture trying to iron out the difficulties which grow out of American ceiling prices.

Although the current situation in oils and fats is better, the long-range outlook shows some clouds on the horizon. These grow out of the reduced feed grain supply,—about a half-billion bushels below the figure of a year ago,—and the high cattle population of the country. In the near future, cattlemen will be forced to liquidate something in excess of 5,000,000 head of stock. They do not want to send this stock to market but their inability to feed them makes it a necessity. Most of all, the cattlemen who now stand well up in the higher tax brackets, do not want to pay the excess profits taxes which will be involved. Of the cattle which will come to market, many will be thin. The fat yield will be lower per head. Thus, it appears that a glut over the next six months will mean an acute shortage of beef and tallow in 1945. Cattle slaughter at twelve main marketing points this year is about 68,000 head above same period in 1943, but still has a long ways to go to reduce excess livestock on farms and ranges to the 77 million figure which WFA desires by Jan. 1, 1945.

Many butchers are reported running short of ration points today when they retail a meat carcass, because they trim only the absolute minimum of fat and receive no ration point allowance for this. The fat salvage program although at the moment in eclipse as a result of excess glycerine and lard stocks, removal of rationing points on shortening fats, and general livestock picture, will become extremely important to soapers in 1945 when the pendulum swings the other way.

### Release Additional Fish Oil

Approximately twenty million pounds of 1943 crop fish oil, all that remained in government reserves, were to be released by the War Food Administration on April 24 for essential war uses. The purpose of the release was to free tank storage space for other essential raw materials. The oil released is to be confined to use in water insoluble metallic soaps, alkyd resins, rubber compounding, lubricants, metal working compounds and other essential military purposes, under use limitations of FDO-60.

### Increase Civilian Fat Supply

The War Food Administration has made a slight increase in allocation of edible fats and oils for civilian use during the second quarter of 1944. Total allocation for civilian purposes for April, May and June is 1,430,000,-

(*Turn To Page 70*)

# FDA *reviews*

GLYCERINE use by civilian consumers during 1943, as contrasted with figures for previous years, and estimated glycerine production and use for the current year, are analyzed in an article by W. A. McConlogue and C. W. Lenth, Fats and Oils Branch, War Food Administration, in an article in a recent issue of *The Fats and Oils Situation*, publication of the United States Department of Agriculture. The table on glycerine consumption which accompanies the article presents for the first time comprehensive and accurate figures on civilian glycerine consumption. For obvious reasons purchases of glycerine by the Army and Navy, and for export, are omitted from the tabulations.

Civilian users of glycerine received 133,000,000 pounds during 1943. Despite drastic curtailment in the use of glycerine for civilian purposes this past year, especially during the second and third quarters, total consumption for the year was only slightly below consumption during the peacetime year, 1940, when 140,-359,000 lbs. of glycerine were consumed.

During the fourth quarter of 1943 it became possible to permit civilian consumption at a higher level, —45,103,000 lbs. going to civilian consumers during this quarter, or at a rate of approximately 180,000,000 lbs. per year. On the basis of January 1, 1944, glycerine stocks of 81,000,-000 lbs., and anticipated 1944 production of approximately 195,000,000 lbs., it is anticipated that it will be possible for 1944 civilian consumption to continue at the fourth quarter 1943 rate. Glycerine was recently removed from specific allocation control and its use is currently unrestricted for direct and indirect war requirements and certain more essential civilian uses.

The accompanying table indicates some rather significant changes

# GLYCERINE PRODUCTION & USE

in glycerine consumption by various civilian industries over the past year or two, reflecting the control measures that have been applied on glycerine use by the FDA. The single largest user of glycerine is the synthetic resin industry, which took 52,488,000 lbs. of glycerine in 1943, as compared with an average of 36,000,000 lbs. per year in the three preceding years. Manufacturers of dynamite and nitroglycerine also upped their consumption rate in 1943, —taking 40,917,000 lbs. as against an average of 30,000,000 lbs. in the 1940-1942 period. Use of glycerine by the tobacco industry dropped to 7,652,000 lbs. in 1943 as compared with an average of 23,000,000 lbs. per year in the 1940-1942 period. Use in dentifrices and toilet articles dropped to 2,823,000 lbs. in 1943 as against an approximate average of 9,000,000 lbs. in the previous three-year period. Use in the manufacture of cellulose films and meat casings dropped from an average of 17,000,000 lbs. in the 1940-1942 period to 11,901,000 lbs. in 1943.

**Glycerine: Apparent domestic disappearance consumption, shipments, and allocations, 1940-44**

| *Item* | 1940 | 1941 | 1942 | 1943 *First quarter* | 1943 *Second quarter* | 1943 *Third quarter* | 1943 *Fourth quarter* | 1943 *Total* | 1944 *estimated* |
|---|---|---|---|---|---|---|---|---|---|
| | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. |
| | *Disappearance, allocations, and consumption or shipments* | | | | | | | | |
| Apparent domestic disappearance[1] | 151,805 | 206,578 | 153,369 | 28,158 | 30,310 | 29,570 | 43,523 | 131,561 | .... |
| Total quantity specifically allocated under FDO-34 | .... | .... | .... | 33,542 | 35,626 | 35,380 | 56,799 | 161,347 | .... |
| Consumption or shipments[2] | 140,359 | 175,135 | 166,350 | 27,394 | 30,537 | 29,897 | 45,103 | 132,931 | 199,150 |
| Small orders and resale[3] | 14,309 | 18,022 | 7,755 | 2,717 | 2,621 | 2,129 | 2,308 | 9,775 | |
| Shipments against specific allocations[4] | .... | .... | .... | 24,677 | 27,916 | 27,768 | 42,795 | 123,156 | |
| | | | | Pct. | Pct. | Pct. | Pct. | Pct. | |
| Percentage of specific allocations taken | | | | 73.6 | 78.4 | 78.5 | 75.3 | 76.3 | |
| | *Consumption and allocations by class of use* | | | | | | | | |
| | *Reported consumption* | | | *Allocations* | | | | | *Estimated consumption* |
| | | | | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | 1,000 lb. | |
| Drugs and pharmaceuticals | 8,885 | 10,874 | 9,304 | 2,162 | 2,301 | 2,003 | 3,332 | 9,798 | 10,750 |
| Dynamite and nitroglycerine | 22,586 | 30,624 | 36,445 | 9,314 | 10,543 | 8,642 | 12,418 | 40,917 | 40,000 |
| Synthetic resins and ester gum | 27,723 | 40,234 | 41,863 | 9,559 | 12,886 | 13,112 | 16,931 | 52,488 | 45,000 |
| Rubber processing | 1,397 | 1,802 | 1,200 | 277 | 363 | 408 | 452 | 1,500 | 1,500 |
| Gaskets and cork products | 6,030 | 8,019 | 8,638 | 1,816 | 1,684 | 1,600 | 3,272 | 8,372 | 10,000 |
| Cellulose films and meat casings | 18,483 | 18,973 | 15,946 | 2,217 | 2,492 | 2,875 | 4,317 | 11,901 | 19,000 |
| Glassine, greaseproof and vegetable parchment | 1,598 | 2,008 | 1,511 | 803 | 538 | 643 | 781 | 2,765 | 3,000 |
| Printers' rollers and supplies | 4,256 | 5,047 | 5,169 | 901 | 1,098 | 976 | 1,470 | 4,445 | 5,000 |
| Textile processing | 2,321 | 2,827 | 1,928 | 586 | 525 | 511 | 620 | 2,242 | 2,500 |
| Leather products | 371 | 472 | 513 | 129 | 287 | 28 | 114 | 558 | 400 |
| Adhesives | 2,453 | 2,871 | 2,304 | 469 | 466 | 549 | 686 | 2,170 | 2,500 |
| Paper other than glassine and greaseproof | 1,056 | 1,540 | 1,510 | 175 | 495 | 744 | 400 | 1,814 | 1,500 |
| Beverages, flavors, candy and gum | 1,998 | 2,411 | 1,529 | 34 | .... | .... | 272 | 306 | 2,000 |
| Margarine, shortening, and other edibles | 3,279 | 4,059 | 2,904 | 259 | 81 | 51 | 852 | 1,243 | 6,000 |
| Tobacco | 24,833 | 25,793 | 20,071 | 1,712 | .... | .... | 5,940 | 7,652 | 32,000 |
| Dentifrices and toilet articles | 9,204 | 11,313 | 7,567 | 731 | .... | .... | 2,092 | 2,823 | 10,000 |
| Miscellaneous | 3,886 | 6,268 | 7,948 | 2,398 | 1,867 | 3,238 | 2,850 | 10,353 | 8,000 |
| Total | 140,359 | 175,135 | 166,350 | 33,542 | 35,626 | 35,380 | 56,799 | 161,347 | 199,150 |

Disappearance and shipments on 100 per cent glycerol basis. Consumption and allocations uncorrected for grade; figures represent approximately 97.5 per cent glycerol.

[1] Computed from Department of Commerce reports on production, trade, and stocks.

[2] 1940-42, consumption reported by 1,234 users on War Production Board form PD-361; probably represents more than 95 per cent of total consumption. 1943, shipments reported by producers and refiners on form FDO-34-1.

[3] 1943, small orders reported on form FDO-34-1; other years, resale reported on form PD-361.

[4] Reported by producers and refiners on form FDO-34-1.

# RAW MATERIALS

FOR THE SOAP AND ALLIED INDUSTRIES

ANIMAL OILS, FATS, CHEMICALS, VEGETABLE OILS

DRUMS — TANK CARS — TANK WAGONS

COCOANUT OIL

CAUSTIC POTASH

STEARIC ACID

CAUSTIC SODA

RED OIL

TALLOW

Every raw material necessary for the manufacture of soap and allied products is carried in stock and is available at the right price for immediate delivery to your door.

**PALMITIC ACID**
90-95% Pure White.
High Melting Point

ALCOHOL
AMMONIA
BLEACHING POWDER
BORAX
BICARBONATE OF SODA
CARBON TETRACHLORIDE
CALCIUM CHLORIDE
CAUSTIC SODA
CAUSTIC POTASH
DYES
DISODIUM PHOSPHATE
GLAUBER'S SALTS
GLYCERINE
METASILICATE
OXALIC ACID
POTASSIUM CARBONATE
SAL AMMONIAC
SALT
SAL SODA
SILICATE OF SODA
SODA ASH
TRISODIUM PHOSPHATE

**GLISYN**
Inquiries solicited on this low price glycerine replacement.

CASTOR OIL
COCOANUT OIL
CORN OIL
COTTONSEED OIL
LARD OIL
NEATSFOOT OIL
OLEIC ACID - RED OIL
OLIVE OIL
OLIVE OIL FOOTS
PALM OIL
PALM KERNEL OIL
PEANUT OIL
RAPESEED OIL
ROSIN
SALAD OIL
SOYA BEAN OIL
SESAME OIL
TEASEED OIL
WHITE OLEINE
FATTY ACID
STEARINE
STEARIC ACID
GREASE
TALLOW

Telephone: MOrsemere 6-4870. Direct New York
Tel.: CHickering 4-7533.
Members New York Produce Exchange.

iEi

**EASTERN INDUSTRIES, INC.**
RIDGEFIELD, N. J.

# TRADE NEWS. . . .

### More Soap Prices Set

Specific prices just set for the following soaps and cleaners at the most expensive stores and which have been added to the list of products to be displayed in retail food stores cover: "Cashmere Bouquet" toilet soap regular size bar—10 cents, or 3 for 27 cents; "Cameo" cleanser size 14 package—9 cents; "Par" granulated size 23 package—26 cents, size 50 package—53 cents, and size 69 package—69 cents. Maximum prices for sales by manufacturers and wholesalers of these three types of soap have been added to present price schedules to retailers. In announcing this action, the OPA pointed out that the redemption of premium plans apply for the benefit of the ultimate consumer. Consumer price levels of Jan., 1943, are thus protected by requiring the continuance of such redemption plans.

### BIMS Plan Golf Dates

Both BIMS of New York and the BIMS of Boston have announced a limited schedule of golf tournaments this year. Martin Schultes of Hewitt Soap Co., chairman of the New York BIMS has given the following dates and places: June 27 at Crestmont Golf Club, West Orange, N. J.; July 25 at Siawoney Country Club, Bronxville, N. Y.; August 24 at Wheatley Hills Country Club, Westbury, Long Island.

Pete Niles of Fritzsche Brothers, Inc., chairman of the Boston BIMS has announced the following dates: June 22 at Woodlawn Golf Club; July 27 at Commonwealth Country Club; September 21 at Charles River Country Club. Chairman of both BIMS sections issued cordial invitations to members of the other group to plan to attend their respective tournaments in the other city. Details regarding each tournament will be sent to members immediately in advance of the dates listed.

### Vernet Affiliated Vice-President

Waldemar Vernet has been elected vice-president of Affiliated Products, Inc., a cosmetic manufacturing and merchandising subsidiary of American Home Products Corp., New York, it was announced Apr. 19. Mr. Vernet had been connected with Mystic Laboratories when Affiliated acquired that company in 1936. He continued in a sales executive position with the latter company. Prior to entering the cosmetic industry, Mr. Vernet was connected with United States Steel Co., and started that company's Clairton, Pa., benzol plant.

WALDEMAR VERNET

### Cosmetic House Elects Coutinho

Dr. Henri Coutinho, for nearly twenty years connected with the cosmetic industry in Paris and New York, and recently research director for George W. Luft Co., Long Island City, was elected president of Perfumers Manufacturing Corp., New York, it was announced recently. He assumed his new duties on May 1. Perfumers Manufacturing Corp. is a cosmetic and pharmaceutical private label firm. Dr. Coutinho has been a member of the scientific advisory committee of the Toilet Goods Association since its inception.

### Essential Oils Group Formed

The War Food Administration, Washington, has just announced the formation of an Essential Oils Industry Advisory Committee to work with government agencies on essential oil problems. In addition to A. L. Kalish of the Office of Distribution, W.F.A., who is chairman of the group, the following committee members from the essential oil industry have been named: F. G. Buehler, George Leuders & Co.; Gerard J. Danco, Gerard J. Danco, Inc.; F. W. Heine, Compagnie Duval; Dr. H. J. Kohl, Norda Essential Oil & Chemical Co.; Dr. Eric C. Kunz, Givaudan-Delawanna, Inc.; Percy C. Magnus, Magnus, Mabee & Reynard, Inc.; P. R. Webb, W. J. Bush & Co.; H. P. Wesemann, Fritzsche Bros., Inc., all of New York, and Walter H. Jelly, Walter H. Jelly & Co., Chicago.

### E. L. King, Watkins Head Resigns

Ernest L. King, Sr., after 40 years service with the company, has resigned due to ill health as president of J. R. Watkins Co., Winona, Minn. His son, Ernest L. King, Jr., who has been general manager since 1941, succeeds him as president.

### Bill Fischer's Son a Lt. Col.

A veteran of over two years in the southwest Pacific fighting against the Japs, having arrived in Pearl Harbor just four days before the attack on Dec. 7, 1941 by the Japs, Major Kenneth Fischer, recently returned to the United States and was elevated to the rank of Lieutenant Colonel in the U. S. Marine Corps. He is the son of William Fischer, sales manager of Magnus, Mabee & Reynard, New York essential oil firm. Col. Fischer was awarded the Purple Heart decoration as a result of wounds suffered in the fighting at Vella La Vella. He will be an instructor at the Marine Training base at Quantico, Va.

# Oil Chemists Meet May 10-12

THE annual meeting of the American Oil Chemists' Society is to be held at the Hotel Roosevelt, New Orleans, May 10, 11 and 12. The complete program for the meeting has been announced as follows:

1. The Economic Position of Oils and Fats in the War and Post-War Periods—R. M. Walsh, Washington, D. C.
2. The Spectrophotometric Determination of Soybean Oil in Cottonseed and Other Vegetable Oils—R. T. O'Connor, D. C. Heinzelman, and F. G. Dollear, New Orleans.
3. Preparation and Properties of Synthetic 1-Monoglycerides and Simple Triglycerides of Linoleic and Linolenic Acids—B. F. Daubert and A. R. Baldwin, Pittsburgh.
4. Continuous Lithium and Aluminum Stearate Grease Manufacture—H. G. Houlton, Louisville.
5. Human Studies in the Digestion and Absorption of Some High-Melting Shortenings—H. E. Longenecker, K. F. Mattil, T. R. Wood, A. R. Baldwin, L. J. Filer, and F. L. Jackson, Pittsburgh.
6. The Effect of Processing Variables on the Free Gossypol Content of Cottonseed Meal—C. M. Lyman, College Station, Texas.
7. The Influence of pH of the Adsorbent on the Properties of Edible Fats and Oils—J. W. Hassler, Tyrone, Pa.
8. Studies in the Expression of Oil from Tung Fruit—R. S. McKinney, N. J. Halbrook, and R. E. Oglesbee, Gainesville, Fla.
9. Oil from Tumbling Mustard Seed—W. H. Goss and J. R. Ruckman, Peoria, Ill.
10. Analysis of Peanut Kernels with Relation to U. S. Grades for Farmers' Stock Peanuts—M. F. Stansbury, J. D. Guthrie, and T. H. Hopper, New Orleans.

SYMPOSIUM—STABILITY OF FATS AND OILS
*A. E. Bailey, Presiding*

11. Notes on the Stabilization of Oxidized Fats by Steam Deodorization with Phosphoric Acid and Commercial Lecithin—R. O. Feuge and A. E. Bailey, New Orleans.
12. Effect of Deodorization and Addition of Certain Antioxidants on the Stability of Lard—R. M. Riemenschneider, S. F. Herb, E. M. Hammaker and F.E. Luddy, Philadelphia.
13. Chemical Changes Occurring in Natural and Hydrogenated Vegetable Fats During Oxidative Rancidity—K. F. Mattil and H. E. Longenecker, Pittsburgh.
14. A Preliminary Comparison of the Stabilizing Effect of Several Recently Proposed Antioxidants for Edible Fats and Oils—J. W. Higgins and H. C. Black, Chicago.
15. Predicting Flavor Stability in Soybean Oil—J. H. Sanders, Cincinnati.
16. Gamma Tocopherol as the Precursor of a Red Quinoid Substance Developed in Cottonseed Oil During Oxidation—C. E. Swift, G. E. Mann, and G. S. Fisher, New Orleans.
17. Tocopherol Concentrates by the Fractional Crystallization of Cottonseed Oil from Solvents—W. S. Singleton and A. E. Bailey, New Orleans.

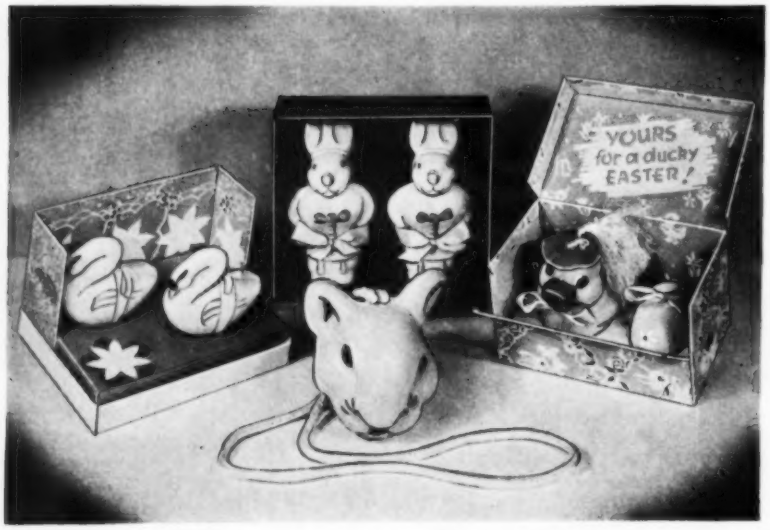
SYMPOSIUM—PHYSICAL PROPERTIES OF FATS AND OILS
*R. T. Milner, Presiding*

18. The Limitation of Penetration Determinations as Applied to Vegetable Shortenings—A. R. Gudheim, Cambridge.
19. Thermal Properties of Fats and Oils. I. Apparatus and Techniques for Low Temperature Calorimetry. II. Heat Capacity and Latent Heat of Cottonseed Oil—G. D. Oliver, W. S. Singleton, and A. E. Bailey, New Orleans.
20. Dilatometric Investigations of Fats. I. Apparatus and Techniques for Fat Dilatometry. II. Dilatometric Behavior of Some Plastic Fats.—A. E. Bailey and E. A. Kraemer, New Orleans.
21. Some Additional Notes on the Specific and Latent Heats of Vegetable Fats and Oils—A. R. Gudheim, Cambridge.
22. Densities and Viscosities of Hydrogenated Peanut Oil—F. C. Magne and H. Wakeham, New Orleans.
23. Melting Points of Binary Fatty Acid Mixtures $C_6$ to $C_{12}$ and their Application in the Determination of Purity—B. J. Grondal and D. A. Rogers, Cambridge.
24. Evaluation of Color Quality of Soybean Oil—E. Freyer, Buffalo.

**Union Carbide Elects Haggerson**

Fred H. Haggerson, vice-president and director of Union Carbide and Carbon Corp., New York, was elected president, succeeding Benjamin O'Shea, who had been president since 1941 and now becomes chairman of the board, at a board meeting Apr. 25. Mr. Haggerson has been associated with Union Carbide and Carbon Corp. for 25 years.

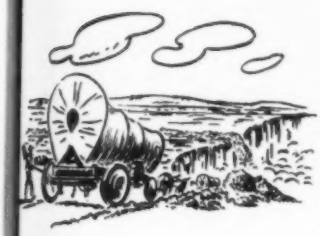
*Easter soap novelties featured by Lord & Taylor, New York, from Kerk Guild, Inc., New York, to retail at 60 cents were these four seasonal numbers. Attractively packaged, they are, from left to right: swans, center front, Easter bunny head with cord attached for showering; rear, pastel "Black Out Bunnies," and "Fleet's In" soap duck and egg.*



TRADITIONS OF NIAGARA

# Far-reaching Frontiers

ENGRAVED BY R. BRANDARD, REPRODUCED THROUGH COURTESY OF NEW YORK PUBLIC LIBRARY



*An Essential Part Of America's Great Chemical Enterprise*

With a frontier history that makes a truly great chapter in American history, Niagara today looks out on a still larger frontier stretching into the future. Her vast power resources harnessed to the wheels of an expanding manufacturing area, she is helping to carry many important industries on to a new era of growth. Particularly significant is the expanding development of the chemical industry in the Niagara Falls area.

In this industry Niagara Alkali Company is one of the oldest and most progressive. Having helped America become chemically independent by pioneering the production, in this country, of several vitally important chemicals, Niagara today is devoting all its experience and modern manufacturing facilities to making increasing quantities of these and other chemicals available for vital wartime purposes. And in so doing, Niagara is learning new lessons in production and acquiring many new ways of serving its customers in the years that follow Victory.

**CAUSTIC POTASH · CAUSTIC SODA · PARADICHLOROBENZENE**
**CARBONATE OF POTASH · LIQUID CHLORINE**

**Niagara ALKALI COMPANY**

60 EAST 42nd STREET, NEW YORK 17, N. Y.

# REMEMBER?

## 10 YEARS AGO

SOAP NEWS EXTRA

OIL AND FAT PRICES DOUBLED!

NEW EXCISE TAX OF 3¢ DOUBLES PRICE OF TWO-THIRDS OF ALL OILS AND FATS USED BY U.S. SOAPERS

OIL AND FAT PRICES HAD INCREASED 25% SINCE APR. 1933

★ **MONTREAL** NEW $600,000 PLANT OF J.R. WATKINS CO. WAS NEARLY COMPLETED

★ **CHICAGO**-WORK WAS BEGUN ON A NEW ADDITION TO THE CLEARING PLANT OF ALLEN B. WRISLEY CO.

★ **CAMDEN** DOBBINS SOAP MFG CO. BOUGHT BY IOWA SOAP CO.

★ **BURLINGTON** (SEE CAMDEN)

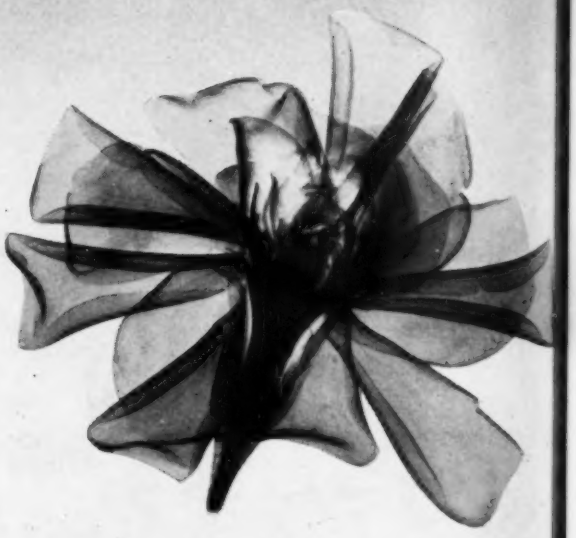
★ **OMAHA** HASKINS SOAP CO. PLANNED AN ADDITIONAL PLANT

★ **DENVER**-NEW PLANT OPENED BY HUNTINGTON LABORATORIES, HUNTINGTON, IND.

**MARKET REPORT**
TALLOW
CHIP SOAP
5¾¢ LB.

SID LONG

# A new look at the Gardenia



*Actual X-Ray of a Gardenia*

As searching as this X-ray of the gardenia is the laboratory method of Dow technicians. Long experience and specialized skill are drawn upon to produce Synthetic Aromatics that give cosmetics and other products added distinction and quality.

SYNTHETIC

AROMATICS

DOW

CHEMICALS INDISPENSABLE TO INDUSTRY AND VICTORY

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

# Soap Conservation in Hotels

THE Association of American Soap & Glycerine Producers has reently completed a study of steps which have been taken by many hotels over the past year or two in the direction of soap conservation. In the course of its survey the association mailed out 3,000 letters and received approximately 500 replies. The responses of the hotel operators indicate very definitely that they are conscious of the need for soap conservation, and that in a substantial number of cases their practice has been changed to make the maximum saving.

It used to be more or less standard practice in first class hotels to provide two cakes of face soap and two cakes of bath soap in each room. These were replaced daily, even for permanent guests and transients who continued to occupy the same rooms. The survey indicates that 62 per cent of the hotels who replied to the soap association's letter now give fewer or smaller cakes to their guests. In many cases the size of cakes has been cut down to as low as half an ounce, and the spare cakes eliminated. Where the rooms continue to be occupied by the same guest, the prevailing practice today is not to replace the old soap cake until it is practically unuseable.

Most hotels now require maids to turn in the slivers of old cakes before issuing replacements. The soap remainders are used in the hotel laundry or for other cleaning purposes. The survey indicates the following method of disposition by various reporting hotels.

71.7% use soap remainders for general cleaning including such purposes as scrubbing tiles and floors, washing windows, walls, stairs, bathroom fixtures, Venetian blinds, etc., and for shampooing rugs and upholstery.

28.7% use soap remainders in the laundry for washing sheets, blankets, pillow cases, lamp shades, curtains, and other laundry.

5.7% use soap remainders in the kitchen for washing pots, dishwashing, cleaning kitchen rags, and other kitchen cleaning.

5.7% use soap remainders in public washrooms.

2.2% sell soap remainders to commercial laundries.

### P&G Nine Months Net Down

Procter & Gamble Co., Cincinnati, for the nine months to Mar. 31, reported a net profit of $13,884,013, after a provision of $10,020,000 for Federal income taxes and a full settlement of patent litigation, equal to $2.10 a share on the common stock. In the comparable period, ending Mar. 31, 1943, P. & G. earned $15,327,044, or $2.32 a share. The statement just issued does not include earnings of the Procter & Gamble Defense Corp., and earnings of the English and Canadian companies except as they have been made available in this country in United States funds.

### Long Time D&O Salesman Dies

Thomas G. Ward, a salesman for the essential oil firm of Dodge & Olcott Co., New York, died at his home in Westfield, N. J., Apr. 22. He had been with the firm for forty-six years, and represented D & O as a salesman in the metropolitan area for more than thirty years. He leaves a widow: Ruth B. Ward; a daughter, Ruth; a brother, William; and a sister, Margaret Ward; all of Westfield.

### CD&CA Hears Commentator

Henry Peterson, newspaper commentator, a veteran of the last war, and more recently military analyst for Generalissimo Chiang Kai-shek for two years, was scheduled to speak at the luncheon meeting of the Chicago Drug and Chemical Association at the Drake Hotel, Apr. 27, on the subject "China's Modern Miracle."

### "Swan" Retains Burns & Allen

Sales of "Swan" soap will be spurred for another five years by the radio comedy of Burns and Allen, Lever Bros., Co., Cambridge, Mass., announced Apr. 18, by the signing of a new five year contract. Burns and Allen have been broadcasting for Lever Bros. since the fall of 1941.

### Honor F. H. Leonhardt

Frederick H. Leonhardt, president of Fritzsche Bros., Inc., New York, essential oils and perfuming materials, was honored by members of his organization at a testimonial dinner at the Hotel New Yorker, the evening of April 15. The occasion was the celebration of the 50th anniversary of his first connection with the company.

### Cans' War Uses Told

More than a million housewives are said to have been told the story of the tin can at war in the past few months by way of guest appearances on home maker radio program interviews of Jean Hollander, director of consumer information of the Can Manufacturers Institute, a recent report states. In her interviews with such conductors of daytime broadcasts as Martha Deane, Adelaide Hawley, Alfred McCann, etc., Miss Hollander explains the scarcity of cans on the home front by describing the wartime role of tin-plate containers. These interviews with Miss Hollander are part of the Institute's current wartime advertising and public relations program interpreting can shortages to the public.

### Ad. Mgr. Leaves White King

Jerry Coleman, for eight years advertising manager for White King Soap Co., Los Angeles, has recently left the company to join the Davis-Beaven Agency, Los Angeles.

### E. H. Dodds Co. Moves

E. H. Dodds Co., soaps and detergents, Verona, N. J., moved on May 1 to 106 Park Ave., W. Caldwell, N. J.

# CAN YOU USE THESE GOOD, LOW COST SYNTHETICS?

UNLESS your present supply of aromatic oils is ample for your needs, we'd like you to sample these excellent substitutes. Their odor strength is typical of the corresponding natural oil; they are long lasting and provide high odor value at low cost. Please address us on your letterhead specifying those items you'd like to sample. They are well worth your investigating.

**GERANIUM**
No. 17

**LEMON**
No. 19

**LAVENDER**
No. 73

**CITRONELLA**
No. 13

**WINTERGREEN**
No. 7

**METHALATE "C"**
(METHYL SALICYLATE SUBSTITUTE)

FOR USE IN:
SOAPS
SOAP POWDERS
CLEANSERS
SPRAYS
DISINFECTANTS
WAXES
SWEEPING COMPOUNDS
METAL POLISHES
TECHNICAL
DEODORANTS
CUTTING OILS
Etc.

**FRITZSCHE BROTHERS, Inc.**
PORT AUTHORITY COMMERCE BLDG., 76 NINTH AVENUE, NEW YORK, N. Y.
BRANCH STOCKS
BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANADA MEXICO, D. F.
FACTORIES AT CLIFTON, N. J. AND SEILLANS (VAR), FRANCE

# T. G. A. Meets May 18, 19

BOTH war and post-war problems are on the agenda of the ninth annual convention of the Toilet Goods Association, meeting at the Waldorf-Astoria Hotel, New York, Thursday and Friday May 18 and 19. Army, OPA, WPB and U. S. Dept. of Commerce officials, as well as representatives of the supply trades are scheduled to address the business meetings relative to mutual problems arising out of the war program. This year the Scientific Section of the association will meet in the evening of the first day of the convention. In cooperation with the Office of Defense Transportation and other government authorities, the TGA has compressed its program to fit the new two-day meeting schedule. For this reason, the Scientific Section meets Thursday evening. The official program follows:

THURSDAY, MAY 18, 1944
A. M.

10:00—Call to Order.
Communications.
Appointment of Nominating Committee.
Appointment of Auditing Committee.
Appointment of Resolutions Committee.

10:30—"ACTIVITIES OF WAR PRODUCTION BOARD IN THE TOILET GOODS INDUSTRY."
by: Elmer B. Tysdal, Chief, Cosmetic Unit, Drug & Chemical Section, Chemical Bureau, WPB, Washington, D. C.

"A SURVEY OF THE PAPERBOARD AND CONTANER SITUATION."
by: F. J. Solon, Assistant to the Director, Containers Branch, WPB, Washington, D. C.

"PLANNING THE DISPOSAL OF GOVERNMENT-OWNED SURPLUS COMMODITIES."
by: Colonel R. P. Kuhn, Headquarters Army Service Forces, New York.

"PRICE CONTROL AND OPA ACTIVITIES IN THE TOILET GOODS INDUSTRY."
by: W. L. Sims, II, Price Executive, Chemicals & Drugs Price Branch, OPA, Washington, D. C.

— Luncheon —
P. M.

2:15—Address on the Activities of the Toilet Goods Association, (1943-1944).
by: Herman L. Brooks, President.

Legal Trends in the Toilet Goods Industry.
by: Hugo Mock, Counsel.

Report of the Board of Standards.
by: H. D. Goulden, Director.

"PROPOSED TRAINING PROGRAM FOR RETAIL SALES PEOPLE."
by: N. J. Leigh, President, Einson-Freeman Co.

MEETING OF THE SCIENTIFIC SECTION

THURSDAY EVENING,
8 P. M., May 18

"MOLECULAR CONSTITUTION AND BROMO ACID SOLUBILITY."
by: Dr. Henri Coutinho, President, Perfumers Manufacturing Corp.

"THE ROLE OF DENTIFRICES & MOUTH WASHES IN THE PREVENTION OF ORAL DISORDERS."
by: L. S. Fosdick, M.D., Professor of Chemistry, The Dental School, Northwestern University.

"COLORS IN COSMETICS."
by: Edward P. Morrish, Director of Laboratories, Affiliated Products Div., American Home Products Corp.

"ON THE INTERPRETATION OF PHARMACOLOGICAL DATA."
by: O. S. Gibbs, M.D., Director Medical Research Division, Plough, Inc.

Report of the Scientific Advisory Committee.
by: Dr. E. C. Merrill, Assistant Vice President United Drug Co.

Election of Chairman and Vice Chairman of the Scientific Section.

FRIDAY, MAY 19, 1944
A. M.

10:00—"POST-WAR PRODUCTION PROBLEMS."
by: Francis Chilson, Consulting Engineer.

(*Turn to Page* 125)

---

**Florasynth Expands Chi. Quarters**

Marking the third expansion move in Chicago since the opening of an office there a little over ten years ago, Florasynth Laboratories, Inc., New York, have just announced the company's occupancy of new and enlarged headquarters in a four story building at 600 W. Monroe St. The new quarters, with their 30,000 square feet of floor space will include offices, a research laboratory, and manufacturing and warehousing facilities, all under the supervision of Dr. William Lakritz, vice-president of Florasynth Laboratories.

# for new product research – PQ silicates

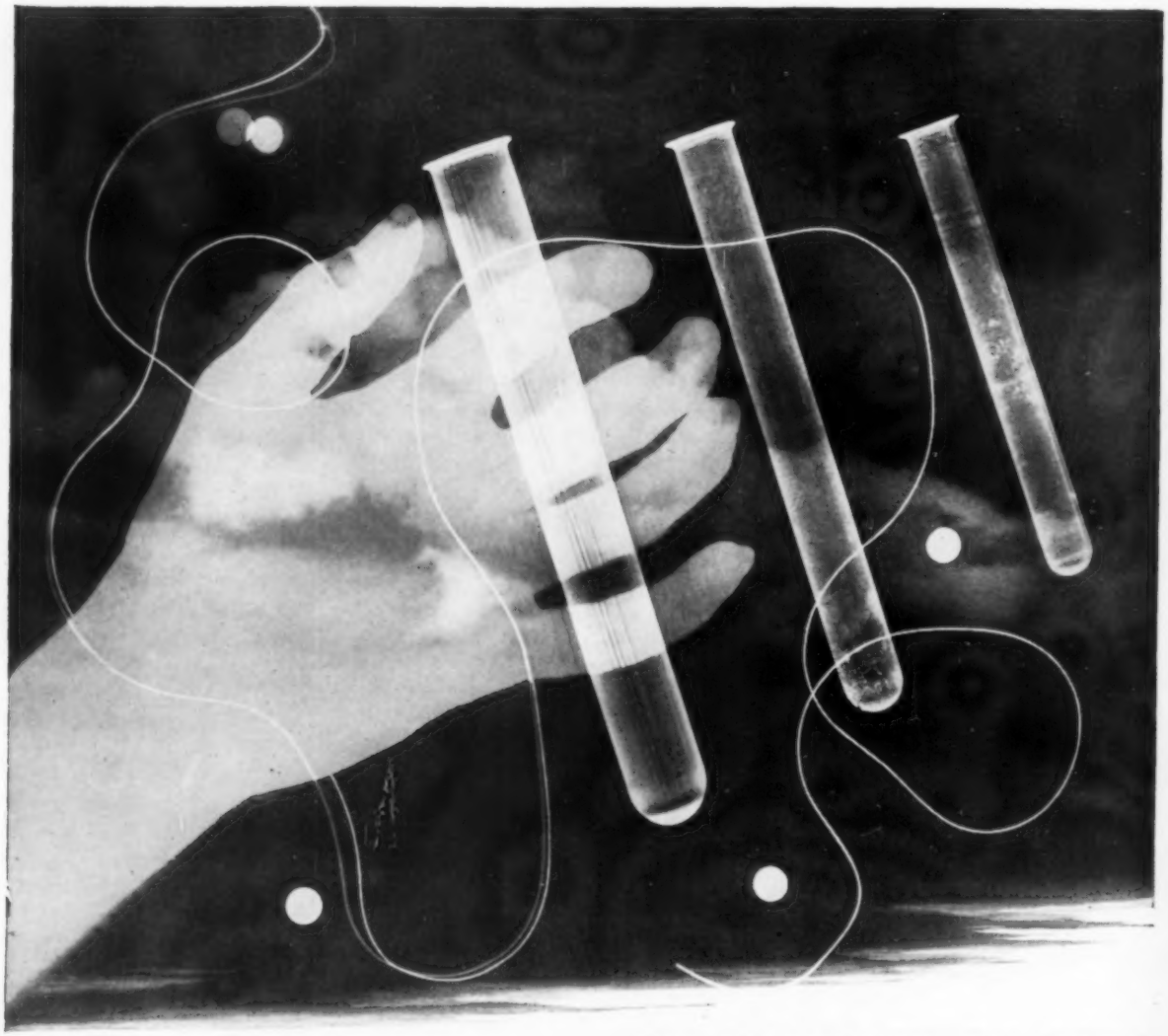
VERSATILE MATERIALS such as PQ Silicates of Soda stimulate numerous ideas in the researcher's mind. Some of the resulting developments are certain of laboratory demise, for we would be the first to admit that silicates are not the answer to the alchemist's dream.

But a basic understanding of properties and reactions of the soluble silicates by chemists is revealed continually in the patent literature. Whether you use a silicate of soda only in the manufacture of your soaps and detergents, or for several other purposes, you'll find our bulletin "Brands, Properties, Applications" stimulating. It describes over thirty of the most popular brands of silicates and their uses in industry. Write for your copy.

---

• PHILADELPHIA QUARTZ COMPANY •

*General Offices and Laboratory: Dept. B, 129 S. Third Street, Phila. 6*
*Chicago Sales Office: 205 West Wacker Drive. Stocks in over 65 cities*



**PQ SILICATES OF SODA**

*WORKS: Anderson, Ind. • Baltimore, Md. • Chester, Pa. • Gardenville, N. Y. • Jeffersonville, Ind. • Kansas City, Kans. • Rahway, N. J. • St. Louis, Mo. • Utica, Ill.*

### Clark Returns to Wyandotte

M. E. Clark, former manager of market research of Michigan Alkali Co., has returned to Wyandotte Chemicals Corp., Wyandotte, Mich., as assistant director of technical service and manager of market research. Mr. Clark was granted a leave of absence in July of '41 at the request of the Office of Price Administration to accept special duties in Washington, D. C., where he later became Chief of the Program Section of the War Production Board. He is a graduate of the University of Colorado in chemical engineering, and for several years was a member of the editorial staff of *Chemical and Metallurgical Engineering*.

### Army Officers Address Chi. Club

"Chemicals At War," an informal, non-technical presentation by army and navy officers, constituted the program for the March meeting of the Chicago Perfumery, Soap & Extract Association. Club members listened to an account of how chemicals enter into military operations and how they are used, as well, to save American lives. Participating in the presentation were Major N. H. Fritz, Chemical Warfare Office, 6th Service Command, Lt. (j. g.) Stanley Livingston, Great Lakes Naval Training Station, and Warrant Officer Jas. B. Powers, from Great Lakes. Lt. Jos. Schwimer, of the Chicago Chemical Warfare Procurement Dist. arranged the program, in cooperation with Stanley Lind of Harry Holland & Son, Inc., chairman of the luncheon committee.

### Chemists Medal To Dr. Dow

Dr. Willard H. Dow, president of Dow Chemical Co., Midland, Mich., has been named to receive the 1944 Gold Medal Award of the American Institute of Chemists. The presentation is to be made at the Biltmore Hotel, New York, May 13. Dr. Dow, a graduate of the University of Michigan in 1919, has been connected with the company founded by his father since that time. He has been president and general manager since 1930. Dow Chemical Co. has made extremely important contributions to wartime production through its sharply expanded output of magnesium and styrene. Other important products include alkalies, insecticides, pharmaceuticals, aromatics, etc.

### Describe Container Re-Use Program

The contribution of soap manufacturers to the WPB's program for conserving wood pulp by re-using second-hand fibre shipping containers was discussed by Frank J. Hynes, assistant director of the Board's container division, at the recent Packaging Conference conducted by the American Management Association in Chicago. Mr. Hynes displaced stickers placed by soap makers on outgoing shipments urging customers to open cases carefully and return them to the factory. It was conceded by Mr. Hynes that the project may be a costly one. He suggested, however, that the program be looked on as a contribution to the war effort and as insurance that the manufacturer will have containers in which to ship his merchandise to the customer.

### Kapp To Represent Van Ameringen

Benjamin Kapp has just been named as west coast representative for van Ameringen-Haebler, Inc., New York perfuming material house, succeeding Joseph B. Darr, who is now in the army. Mr. Kapp has many years experience in the aromatic field and is well known throughout the region. His headquarters will be at the Los Angeles office of the L. H. Butcher Company and at the other offices of the Butcher Company in other cities. Stocks are carried by the L. H. Butcher Company in San Francisco, Los Angeles, Seattle, Salt Lake City and Portland.

### Spazier Soap Builds

An addition to the warehouse of the Spazier Soap Chemical Company is being erected at 1619 Twentieth street, Santa Monica, Calif., at a cost of $2,500.

### Fire at Fairbank Soap Co.

A warehouse at the plant of Fairbank Soap Co., Toronto, Canada, was severely damaged in a fire on April 5. Damage was estimated at $3,500.

### Economics Lab. Buys Chi. Plant

Economics Laboratories, Inc., has purchased a four-story concrete factory building at 3550 S. Morgan St., Chicago, to which all operations in that city were transferred on May 1 from the former quarters at 1100 W. 37th St. The investment provides a substantial expansion in manufacturing space. A second plant in Brooklyn, N. Y., purchased about a year and a half ago, is now utilized almost entirely for production of "Microklene," a new germicidal dishwashing rinse, used in cold water and extensively employed by the armed forces. General offices are in St. Paul, Minn.

### Chi. Toiletries Show July 6-14

The Chicago Associated Toiletries Salesmen will hold their third annual trade show July 6 to 14 at the Palmer House. The hotel's entire seventh floor has been reserved for the approximately 100 exhibitors who are expected to participate in showing their holiday lines. Last year buyers from 15 states attended the affair. Plans for the show are being developed under the direction of H. R. Adamson, of Elmo Sales Corp., 55 E. Washington St., Chicago, and vice-president of the Association. H. F. Carson of Dorothy Gray is president, and E. F. Deane of Richard Hudnut, Inc., is secretary-treasurer.

### Porter Appoints District Mgrs.

H. K. Porter Co., Pittsburgh, manufacturer of process equipment, has recently announced the following appointments: district manager in Rochester, N. Y., Joseph F. Gaffney; district manager in Cincinnati, R. W. Steves; district manager in Philadelphia, W. T. Campbell; field service engineer for northern New Jersey, J. L. Cunningham.

### Brill Equipment Moves

Brill Equipment Co., machinery dealers, are moving their offices and warehouse from 183 Varick Street, New York, where they have been for the past twelve years. The new offices will be located at 225 West 34th Street, New York, and the new warehouse and shop will be located at 2401 3rd Avenue, Bronx, New York.

AMOCO MOTOR OIL
Goes to the front in these special containers.

## Service Station at the front

No computing gas pumps . . . no "Clean Rest Rooms" . . . and if you're talking about "free air" you mean a sky swept free from enemy airplanes.

But that's the sort of wartime service station to which Amoco Motor Oil is being delivered today . . . delivered by the efforts of the Navy and the Coast Guard to help maintain the Army's motorized equipment.

And when Amoco Motor Oil travels to the front . . . it travels in specially designed Crown kits . . . about five-gallon steel containers that protect the oil from sea water and sand . . . from rough handling under battlefront conditions.

Supplying those containers to the American Oil Company is one more of Crown Can's wartime jobs . . . one more way an organization that so faithfully served America's peacetime needs is pitching in to help speed victory!

CROWN CAN COMPANY, New York · Philadelphia
*Division of Crown Cork and Seal Company,* Baltimore, Md.

★ ★ ★ ★ CROWN CAN ★ ★

# BIDS AND AWARDS

### Justice Dept. Wax Bid

Robinson Plumbing Supply Co., St. Paul, Minn., was the only bidder in a recent opening for miscellaneous supplies by the Department of Justice, Springfield, Mo., on 250 pounds of carnauba wax. They entered bids on 200 pounds only at $1.15 and an alternate at 65c.

### Justice Dept. Insecticide Bids

The list of firms bidding on 100 gallons of liquid insecticide in a recent opening by the Department of Justice, Springfield, Mo., for miscellaneous supplies includes: Thompson Hayward Chemical Co., Kansas City, Mo., $1.74; Brilco Laboratories, Brooklyn, $1.18; R. M. Hollingshead Corp., Camden, N. J., 89c; Capitol Chemical Co., Washington, D. C., $2.80; X-Ray Insecticide Laboratories, New York, $1.15, $10 deposit on drums; C. B. Dolge, Westport, Conn., $2.20, plus $6 drum deposit; N. Brittingham & Sons, Philadelphia, $1.05; Fumol Corp., Long Island City, $1.80; Factory & Yard Supply Co., New York, 88c, $3 deposit on drums; and Sinclair Refining Co., New York, 92c.

### Navy Paste Soap Bids

R. M. Hollingshead Corp., Camden, N. J., entered the low bid of 14.5c on 8,000 pounds of paste soap in a recent opening for miscellaneous supplies by the New York Navy Yard, New York. Other bids and bidders were: Crystal Soap & Chemical Co., Philadelphia, 15.5c; Clifton Chemical Co., New York, 18c; Harley Soap Co., Philadelphia, 19c; Cole Laboratories, Long Island City, N. Y., 19.8c, and Unity Sanitary Supply Co., New York, 25c.

### Agricultural Rotenone Root Bids

Bids of 33c a pound, by Dodge & Olcott Co., New York, and 35c a pound by R. J. Prentiss & Co., New York, were submitted on 200 pounds of rotenone bearing roots in a recent opening for miscellaneous supplies by the division of Purchases, Sales and Traffic of the U. S. Department of Agriculture, Washington, D. C. In another opening for miscellaneous supplies by the same division of the U. S. Department of Agriculture, Washington, D. C., for an unspecified quantity of insecticidal dust, Dodge & Olcott, New York, the only bidder, entered a bid of 17c per pound.

### Carbon Tet Award

Bids and awards announced in connection with a recent opening for miscellaneous supplies by the Philadelphia Navy Yard, Philadelphia, on 1,000 gallons of technical carbon tetrachloride included those of Buckeye Soda Co., Painsville, O., $1,090, accepted; Merck & Co., Rahway, N. J., $1.65, and James Good, Philadelphia, $1.14 a gallon.

### Green Soap Bids

Among the bids received on 1,500 pounds of green soap in a recent opening for miscellaneous supplies by the Procurement Division of the Veterans Administration, Washington, D. C., were those of Crystal Soap & Chemical Co., Philadelphia, $169.50; Puritan Co., Rochester, N. Y., $191.40; Harley Soap Co., Philadelphia, $192; Thompson - Hayward Chemical Co., Kansas City, Mo., $247.50, and Wm Messer Corp., New York, $209.40.

### P. O. Scouring Powder Bids

Among the bidders on 30,000 pounds of scouring powder in a recent opening for miscellaneous supplies by the Post Office Department, Washington, D. C., for delivery to New York, Chicago, Atlanta and Kansas City, were: Pal Products Co., Brooklyn, fob Brooklyn, 4c, and on 9,000 pounds fob New York, 4c; National Milling & Chemical Co., Philadelphia, fob New York, 3.33c, fob Chicago, 3.92c, fob Atlanta, 4.1c and fob Kansas City, 4.53c; National Cleanser Products Co., New York, fob New York, 2.12c; General Soap Co., Chicago, fob Chicago, 3c; Wyandotte Chemicals Corp., Wyandotte, Mich., fob Wyandotte, 5.56c, and fob destination, 6c; Columbia Sales Co., Washington, fob Washington, 6.5c; Unity Sanitary Supply Co., New York, fob New York, 6c; Armour & Co., Chicago, fob Chicago and Babbitt, N. J., 2.92c; Hysan Products, Chicago, fob Chicago, 2.75c; Chemical Division, Dubuque, Ia., fob Dubuque, 7.7c; and Imperial Products Co., Philadelphia, fob Philadelphia, 2.58c.

### Navy Roach Powder Award

In a recent opening for miscellaneous supplies by the Philadelphia Navy Yard, Philadelphia, A. G. Mattison, Portsmouth, N. H., submitted a low bid of 22c per lb. on 1,400 pounds of roach powder, which was accepted.

### Chicago Drug Assn. Dance May 20

The Chicago Drug and Chemical Association has set May 20 as the date for their annual spring party at the Drake Hotel for members and ladies. Dinner, entertainment and dancing are being arranged by the entertainment committee.

### Pepsodent Advances McQueen

Harry McQueen, formerly assistant sales manager for the Pepsodent Co., Chicago, has been promoted to the position of central sales manager, in charge of sales activities in the midwestern states. His office will be located in Chicago.

### Carbide Names Directors

Ralph R. Browning, Paul P. Huffard and Homer A. Holt were elected to membership on the board of directors of Union Carbide & Carbon Corp., New York, at the recent annual meeting.

### E. R. Commons Shulton Salesman

Edmund R. Commons has been named as a sales representative for Shulton, Inc., in the Brooklyn and Long Island territory.

### Charles Chrystal Co. Moves

Charles B. Chrystal Co., New York, dealers in abrasives and fillers, have recently moved their offices to 53 Park Place.

schimmel

spray perfumes

*These double duty perfumes are fragrant and refreshing and also mask the odor of synthetic killing agents. When inquiring, please specify whether you wish a perfume effect or a purely neutralizing action.*

*If your spray presents special problems, send us an unperfumed sample. We will be glad to work out an odor suitable for your particular product.*

SCHIMMEL & CO., INC.
601 WEST 26TH STREET
NEW YORK 1, N. Y.

# NEW TRADE MARKS

The following trade-marks were published in the April issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

### Trade Mark Applications

BALCO—This in bold, upper case letters within a triangular design for textile cleaning compounds in liquid and solid forms, and as a spot remover. Filed by W. P. Ballard & Co., Birmingham, Ala., July 5. 1943. Claims use since Jan. 1, 1926.

KLEEP—This in upper case, shadow letters for cleansing preparation. Filed by Plee-Zing, Inc., Chicago, July 21, 1943. Claims use since June 16, 1943.

YELLOW HOOP—This in upper case, bold letters for cleansers for laundry, factory and home. Filed by Wyandotte Chemical Corp., Wyandotte, Mich., Oct. 14, 1943. Claims use since May, 1911.

NAPTHENE THREE STARS CLEANING CRYSTALS—This in upper and lower case, bold and script letters for cleaning crystals. Filed by Three Star Products, Chicago, Nov. 29, 1943. Claims use since Jan. 10, 1935.

'SQUICK—This in upper case, shadow letters for dish washing compound. Filed by Fuld Bros., Baltimore, Dec. 3, 1943. Claims use since Oct. 25, 1943.

NOMAYDE—This in upper case, extra bold letters for dry cleaners and soaps. Filed by Nomayde Co., Brooklyn, Dec. 8, 1943. Claims use since Oct., 1943

DEVASTATING—This in upper case, bold letters for toilet soaps. Filed by Campana Sales Co., Batavia, Ill., Jan. 1, 1944. Claims use since Dec. 15, 1943.

CLIPPER—This in upper case, black bold letters for shoe and boot polish. Filed by General Shoe Corp., Nashville, Tenn., Jan. 19, 1944. Claims use since Dec. 23, 1943.

PRALYTEX—This in upper case, bold stencil letters for insecticidal preparations. Filed Whitmire Research Labs., St. Louis, Dec. 31, 1943. Claims use since May 27, 1940.

SERVEL—This in upper case, black bold letters for cleaning and polishing compound for enameled and porcelain surfaces. Filed by Servel, Inc., Evansville, Ind., Oct. 20, 1943. Claims use since Jan., 1939.

CAROLE ANNE—This in upper and lower case, bold script letters for foam bath. Filed by Allied Toiletries, Inc., Philadelphia, Nov. 8, 1943. Claims use since June, 1942.

AD—This in upper and lower case, shadow letters within a circular design for water softener. Filed by F. E. Everson, New York, Nov. 25, 1943. Claims use since June 15, 1942.

RU-PRE-SOL—This in upper case, bold letters for rust removal and prevention preparation. Filed by Machinery Supplies Corp., New York, Nov. 25, 1943. Claims use since Aug. 1, 1943.

RELIANCE—This in upper and lower case, extra bold black script letters for insecticides, specifically ant poison. Filed by McKesson & Robbins, Inc., New York, Dec. 13, 1943. Claims use since Feb. 13, 1925.

GABY—This in extra bold black, upper and lower case script letters for insect repellents. Filed by Gaby, Inc., Philadelphia, Dec. 30, 1943. Claims use since May 22, 1930.

SENECA FLAKES—This in upper case, bold letters for cleaning and detergent material. Filed by Wyandotte Chemicals Corp., Wyandotte, Mich., Dec. 3, 1943. Claims use since July 21, 1938.

THREE CHEERS—This in upper case, bold letters for soap compound for dishwashing, etc. Filed by Charles Bain, Philadelphia, Jan. 14, 1944. Claims use since Jan. 10, 1943.

B B BEAU BRUMMEL—This in upper case and reverse letters in a circular design around the figure of an English gentleman for shoe polish. Filed by Beau Brummel Polish Co., Worcester, Mass., Jan. 26, 1944. Claims use since Mar. 13, 1920.

P AND G—This in upper case, extra bold black letters for soap. Filed by Proctor & Gamble, Inc., Cincinnati, Feb. 18, 1944. Claims use since Jan. 1, 1905.

IERNOZ—This in upper case, extra bold letters for a germicide. Filed by Albert Laboratories, Inc., Chicago, July 12, 1943. Claims use since Apr. 30, 1943.

RODALARM—This in upper case bold letters for insect and rodent repellents, insecticides, fungicides, herbicides, rodenticides and bactericides. Filed by Nuguard Chemicals, Inc., East Paterson, N. J., Jan. 6, 1944. Claims use since Sept. 13, 1943.

STERITOIL—This in upper case, bold letters for toilet bowls, drains and bath tub cleaner. Filed by Sani-Toil Laboratories, Joplin, Mo., Feb. 15, 1944. Claims use since Jan. 27, 1944.

INVITING—This in upper case, bold letters for tooth paste and powder. Filed by Gimbel Bros., Inc., New York, Dec. 20, 1943. Claims use since Oct. 29, 1943.

AER-NU—This in extra bold, upper and lower case letters for odor neutralizer. Filed by Household Products, Inc., Stamford, Conn., Feb. 7, 1944. Claims use since Jan. 21, 1944.

### Trade Marks Granted

406,338. Sweeping compound. Filed by Canfield Oil Co., Cleveland, Sept. 4, 1943. Serial No. 463,224. Published Jan. 18, 1944. Class 4.

406,343. Auto, floor and furniture polish. Filed by Standard Oil Co. of California, Wilmington, Del., Oct. 19, 1943. Serial No. 464,257. Published Jan. 18, 1944. Class 16.

406,356. Detergent compositions. Filed by National Oil Products Co., Harrison, N. J., Nov. 3, 1943. Serial No. 464,664. Published Jan. 18, 1944. Class 4.

# SYN-O-TOL "L"

*The New Synthetic Detergent Base*

for

Textile Detergents
Paper Detergents
Leather Detergents
Dairies Detergents
Dishwash Detergents
Fruit and Vegetable Detergents
Shampoos
Dentifrice Foaming Agent
Auto Cleaners
Aircraft Cleaners
Metal Cleaners
Floor and Wall Cleaners
Rug Cleaners
Bubble Bath

SYN-O-TOL "L"
*Outstanding Features*
Viscous Amber Liquid
Practically Anhydrous
1/10% Solution foams abundantly in ice cold or hot water
Dissolves instantaneously
Does not leave visible film on scoured surface
Compatible with soap (not a sulfated product)
Resistant to hard water
Excellent penetrant
No harmful acids or alkalies

*Samples and special information promptly furnished on request.*

Sales agencies for several territories still open. Inquiries invited.

OIL & CHEMICAL DIVISION

**E. F. DREW & COMPANY, INC.**

Chamber of Commerce Bldg.
80 Federal Street
Boston 10, Mass.

15 East 26th Street
New York 10, N. Y.

Palmolive Building
919 N. Michigan Ave.
Chicago 11, Ill.

*Factory and Laboratories: Boonton, New Jersey*

406,360. Cleaning, cleansing and detergent material for laundry use. Filed by Wyandotte Chemicals Corp., Wyandotte, Mich., Nov. 8, 1943. Serial No. 464,841. Published Jan. 18, 1944. Class 4.

406,364. Liquid for cleaning fabrics. Filed by Wilson Imperial Co., Newark, N. J., Nov. 13, 1943. Serial No. 464,984. Published Jan. 18, 1944. Class 4.

403,365. Toilet soaps. Filed by Les Parfums de Dana, Inc., New York, Nov. 16, 1943. Serial No. 465,033. Published Jan. 18, 1944. Class 4.

406,368. Soap. Filed by R. C. Williams & Co., New York, Nov. 19, 1943. Serial No. 465,170. Published Jan. 18, 1944. Class 4.

406,522. Deodorant for industrial use. Filed by O. D. Chemical Corp., New York, Mar. 16, 1943. Serial No. 459,162. Published Jan. 18, 1944. Class 6.

406,540. Poison for earwigs and other insects. Filed by Kil-A-Wig Co., Portland, Ore., June 26, 1943. Serial No. 461,690. Published Jan. 18, 1944. Class 6.

406,570. Protective hand cream. Filed by Physicians and Hospitals Supply Co., Minneapolis, Oct. 4, 1943. Serial No. 463,886. Published Dec. 21, 1943. Class 6.

406,600. Wetting and dispersing agent. Filed by National Oil Products Co., Harrison, N. J., Nov. 3, 1943. Serial No. 464,663. Published Jan. 18, 1944. Class 6.

406,605. Tooth Powder. Filed by George C. V. Fesler Co., Montgomery, Ala., Nov. 5, 1943. Serial No. 464,746. Published Jan. 25, 1944. Class 6.

406,615. Toilet soaps. Filed by Les Parfumes de Dana, Inc., New York, Nov. 16, 1943. Serial No. 465,037. Published Feb. 1, 1944. Class 4.

406,404. Liquid for cleaning old paint and varnish surface for refinishing. Filed by Wilson-Imperial Co., Newark, N. J., Oct. 16, 1941. Serial No. 447,857. Published June 2, 1942. Class 16.

406,439. Jewelry cleaner. Filed by D. Blum & Co., New York, Oct. 12, 1943. Serial No. 464,077. Published Jan. 25, 1944. Class 4.

406,453. Substitute for carnauba wax. Filed by William B. Gallagher, Philadelphia, Nov. 6, 1943. Serial No. 464,780. Published Jan. 25, 1944. Class 1.

406,467. Soap. Filed by House of Tre-Jur, Inc., New York, Nov. 18, 1943. Serial No. 465,108. Published Jan. 25, 1944. Class 4.

406,666. Degreasing and cleaning compounds in paste, powder and liquid form. Filed by Alkem Products Co., Jersey City, N. J., Nov. 28, 1942. Serial No. 457,102. Published Feb. 8, 1944. Class 4.

406,667. All-purpose, household cleaning compound. Filed by J. E. Johnson & Co., Chicago, Dec. 8, 1942. Serial No. 457,276. Published Mar. 9, 1943. Class 4.

406,668. Combination soft soap and detergent paste for cleaning silver. Filed by Norma Chemical Co., Mt. Vernon, N. Y., Jan. 1, 1943. Serial No. 457,706. Published Feb. 8, 1944. Class 4.

406,680. Shampoo. Filed by Procter & Gamble Co., Cincinnati, Nov. 30, 1943. Serial No. 465,404. Published Feb. 1, 1944. Class 6.

406,681. Insecticides. Filed by Geigy Co., New York, Dec. 1, 1943. Serial No. 465,426. Published Feb. 1, 1944. Class 6.

406,694. Metal cleaning compound. Filed by W. D. MacDermid Chemical Co., Bristol, Conn., Sept. 18, 1943. Serial No. 463,487. Published Feb. 8, 1944. Class 4.

406,715. Soaps. Filed by Parfums Schiaparelli, Inc., New York, Nov. 20, 1943. Serial No. 465,191. Published Feb. 8, 1944. Class 4.

## RUG & UPHOLSTERY CLEANERS

*(Continued from Page 27)*

overcome in the products themselves. But it stands to reason that a piece of furniture or a rug that has not been cleaned for some time darkens up from ordinary dirt and grime in the air and underfoot. So that, when the householder attempts to clean a few outstanding spots, some of the overall covering of grime or dirt is removed from the specific area and the cleaned spot cannot help but contrast with the area that has not been cleaned. This means that the whole piece will have to be cleaned.

The similarity in the wording of the directions on many of these products is striking. Here, for example are lines taken from three of the cleaners: "For best results brush or vacuum surface before using"; "first thoroughly vacuum or sweep the rug"; and "remove as much surface dirt as possible with vacuum cleaner or broom." Labels from the paste cleaners also reflect this similarity of labeling practically to the point of duplication. The products are generally described as: "all purpose cleaners," or "cleaner, water softener and deodorant—all in one."

The increased use by home makers of rug and upholstery cleaners as a result of the war may, according to the spokesman for one manufacturer, stem from the fact that people would rather spend the extra energy required in cleaning their rugs, upholstery, etc., themselves than to have to wait the protracted periods now necessary for commercial cleaning jobs to be completed. In addition, the increased activity in retail stores has meant more people in the stores and therefore more potential customers for the demonstrator to show her wares to. Finally, in spite of materials and packaging shortages, etc., there has been an increasing amount of promotion been done by both retailers and manufacturers of rug, carpet and upholstery cleaners.

The post war outlook for products of this type is definitely encouraging. With solvents more freely available again, and with the new developments in synthetic detergents which will become available for civilian use in the post war period, a sharp improvement in the quality of rug and upholstery cleaners can be predicted. Finally continued improvement in merchandising techniques also augurs well for increased post war sales volume.

◆

### L. A. Soap Advances Keller

Jack Keller has recently been appointed sales supervisor of the Los Angeles division for the Los Angeles Soap Company in a promotion from salesman.

The familiar fragrance of your soaps and creams and powders identifies them to your customer. It pleases her . . . brings her back again and again to ask for them by name. To maintain this particular fragrance today may be taking your every effort, all the skill of your master parfumeurs.

In these trying times of scarcity, the Du Pont Aromatics laboratory is seeking to give you more than ordinary assistance . . . to help in your difficulty of matching odors with different essences and bases from those originally used. Perhaps we can offer you a solution . . . or a product that with your new knowledge will prove a keystone for your problem formula

Synthetic aromatics are a product of chemistry, and Du Pont Synthetic Aromatics reflect the technical skill of all the Du Pont Laboratories. E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Dept., Aromatics Section, 40 Worth Street, New York 13, N. Y.

DU PONT
REG. U. S. PAT. OFF.

# Du Pont Aromatics

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

# RAW MATERIAL MARKETS

As of April 25, 1943

THE steadily improving condition of the fats and oils supply may be one of the ironical developments of the war as far as the soap maker is concerned. With fats and oils, a cause for concern almost since the beginning of the war, becoming more easily available, a shortage in an entirely different quarter rises threateningly over the soap industry and seems to preclude the possibility of greater soap production. While the new shortage and production-cut threat — packaging materials — may not actually materialize to the degree expected by some, the threat is admittedly a serious one.

Indicative of the improved position regards the fats and oils supply are reports that lard stocks in storage, for example, are continuing to rise and are near record levels. Packers are said to be looking for a further increase in reserve stocks owing to the continued large run of hogs and the decreased government purchases. Both factors are having the effect of reducing prices of lard. In March, cold storage lard stocks jumped another five million pounds bringing the total up to 69,541,000 pounds as compared with 15,425,000 pounds in stock a year ago. How long these heavy stocks will continue is speculative since soap makers are believed to have made fairly heavy purchases of lard in the last few weeks and will continue to do so as long as it is point free. The heavy civilian buying of point free lard which was expected when rationing restrictions were lifted seems to have failed to materialize. With the removal of vegetable oil shortening from the ration list, demands for lard by the housewife dropped off since it is believed vegetable shortenings are favored by housewives as against lard.

Other indications of an easing in the civilian supply of fats and oils came when it was announced that salad oils were to be removed from the ration list. About the same time came word that certain cuts of pork were believed also to be removed from point rationing and that point values for lamb would be cut in some cases up to 50 per cent. Butter, too, it was predicted, would have its point value cut.

Meanwhile, other oils, principally imports, and in some cases replacements for other imported oils that have been cut off by the war in the Pacific, were put under price


**W. C. HARDESTY CO.**

41 EAST 42nd STREET • NEW YORK 17, N.Y.

If you consume fatty acids in your manufacturing process or make a product in which fatty acids may be used to replace scarce materials, it will pay you to investigate Hardesty as a source of supply. Through advanced manufacturing methods Hardesty produces many specialized products with unusual chemical characteristics.

RED OIL (Saponified) — STEARIC ACID (Distilled)

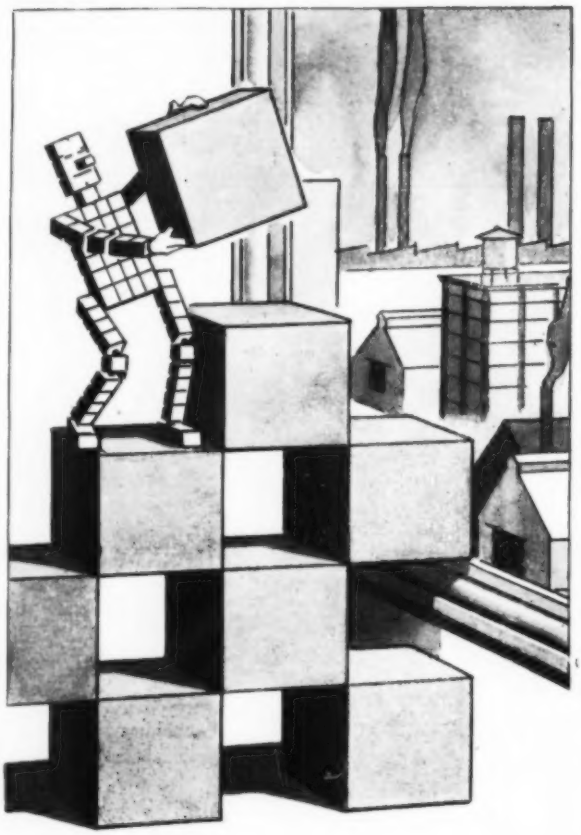
ANIMAL AND VEGETABLE FATTY ACIDS

Cotton Red Oil Fatty Acids — Hydrex — Corn Oil Fatty Acids
Palm Oil Fatty Acids — Specialty Fatty Acids

GLYCERINE • PITCH • WHITE OLEINE

FACTORIES

DOVER, OHIO · LOS ANGELES, CALIF. · TORONTO, CANADA



# "Building my adsorptive capacity *to increase your yield"*— "MONTY"*

**The increased bleaching efficiency made possible by the added acres of adsorptive pores in every pound of Special Filtrol results in greater oil recovery—a vital asset in these days of oil conservation. It takes less Special Filtrol to do a better decolorizing and purifying job on both ordinary and hard-to-bleach stocks; its use requires less equipment and there is less oil soakage loss to the press cake—important economy features of this pure, uniform and highly activated natural material.** *Reg. U.S. Pat Off.

## *SPECIAL* FILTROL

**FILTROL CORPORATION**

**General Offices: 634 S. Spring St., Los Angeles 14, Calif.**

**Plants: Vernon, Calif. and Jackson, Miss.**

# FEDERAL *All-Plastic* SOAP DISPENSER

**Prompt Shipment on Orders Carrying Priorities**

**Made of amber-transparent Tenite plastic... strong, long-wearing, light in weight • Streamline styling for modern eye appeal • Positive agitator prevents packing... insures smooth, even flow • Non-clog, thrust-in discharge valve easily taken apart for cleaning • Heavy brackets for direct mounting to wall or pipe • Wide-opening top for easy filling • Use your own nameplate • Lock top (optional) • Capacity: one quart • Overall size: 8" high x 3¼" x 3½" • Fully guaranteed.**

***Designed for: industrial plants, public buildings, office buildings, schools, etc.***

**(WE DO NOT SELL SOAP POWDER)**

**FEDERAL TOOL CORP.**

400 N. LEAVITT ST., CHICAGO 12, ILLINOIS

ceilings. These included coyol, set at 11.10 cents per pound; China seed, set at 24 cents, fob Pacific Coast Ports, as compared with 24½ cents per pound for perilla, fob New York; and Garcia nut oils, 39 cents per pound in drums, carlots, fob Pacific Coast ports. These oils were not used previously to any extent in the trade, but now are employed for, among other things, quick lather shaving soaps. Among other oils whose ceiling prices were adjusted were: rapeseed oil, 11.50 cents per pound, c.i.f. Pacific Coast and Gulf ports,babassu in tank cars shipped from Pacific Coast or Gulf ports, 11.10 cents per pound; and castor oil No. 1 and castor oil No. 3 in tank cars shipped from the Pacific Coast ports, 13.50 cents and 13.20 cents per pound.

Although the War Production Board revoked Allocation Order M-106 covering shellac, Apr. 21, which removed the need for shellac dealers and consumers to obtain the approval of WPB for purchase or use of shellac, adequate supplies will not be available for some time, according to a bulletin issued by the American Bleached Shellac Manufacturers Association, New York. The order was revoked because the WPB felt that the Government stockpile of shellac was sufficiently large to take care of war needs, the Shellac Manufacturers Association bulletin said. However, it points out the stockpile consists, for the most part, of high cost, high grades of orange shellac for which there is little demand by American consumers. There is still a great scarcity of those grades needed by these consumers and particularly of the grades from which bleached shellac is produced, it adds.

On the essential oil front during the past month a number of noteworthy developments took place as far as pricing was concerned. A ceiling price of $2.25 a pound for producers' sales of oil of cedarleaf or oil of spruce and dealers' ceilings ranging from $2.65 to $3.34 a pound, depending upon the quantity packed in a single container, were announced Apr. 18, by the OPA. Two days earlier, the OPA acted to reduce prices for imported natural menthol. A ceiling price of $15 a pound, duty paid, fob a U. S. port of entry, was established effective Apr. 17, for all importers, whether industrial users or resellers. An exception is made for any importer who has purchased menthol by establishing an irrevocable letter of credit. In this instance the importer will be permitted to take delivery after Apr. 17, at the price called for in the contract.

Price changes taking place during the past month were highlighted by a rise in price of bois de rose oil from $4.10 to $4.25 per pound. This is believed to have originated from the fact that the supply reaching this country recently was converted into derivatives, leaving only a small supply for dealers. Other price rises and changes affected citral, $3.70; eugenol, $2.75; oil of cedarwood, 85 cents; oil of lemongrass, $1.45 and Brazilian orange oil, $1.25.

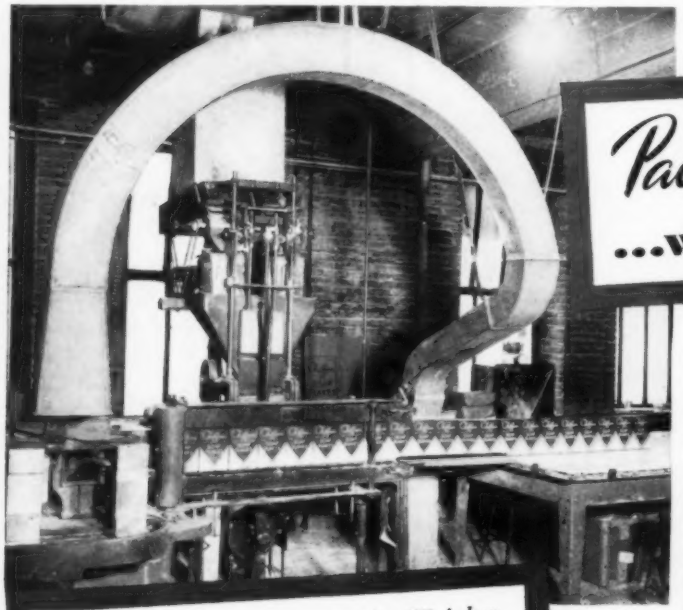



*Illustration: Triangle Two Section Weigher for handling soap flakes at Armour & Company, Chicago.*

- Fast — Accurate
- Does not break flakes
- Fully and easily adjustable

*Package Soap Flakes*
**...without breakage**

HERE'S a weigher specially designed to handle soap flakes without breakage! In wide use throughout the industry, it automatically weighs the flakes, fills the carton and by means of a plunger presses the flakes into the carton. Machine is extremely accurate and will weigh and fill 30 to 40 cartons per minute.

This machine is just one of a complete line of automatic and semi-automatic machines for the packaging of soap products. Write for details and literature on how Triangle machines can step up production and save manpower in your plant.

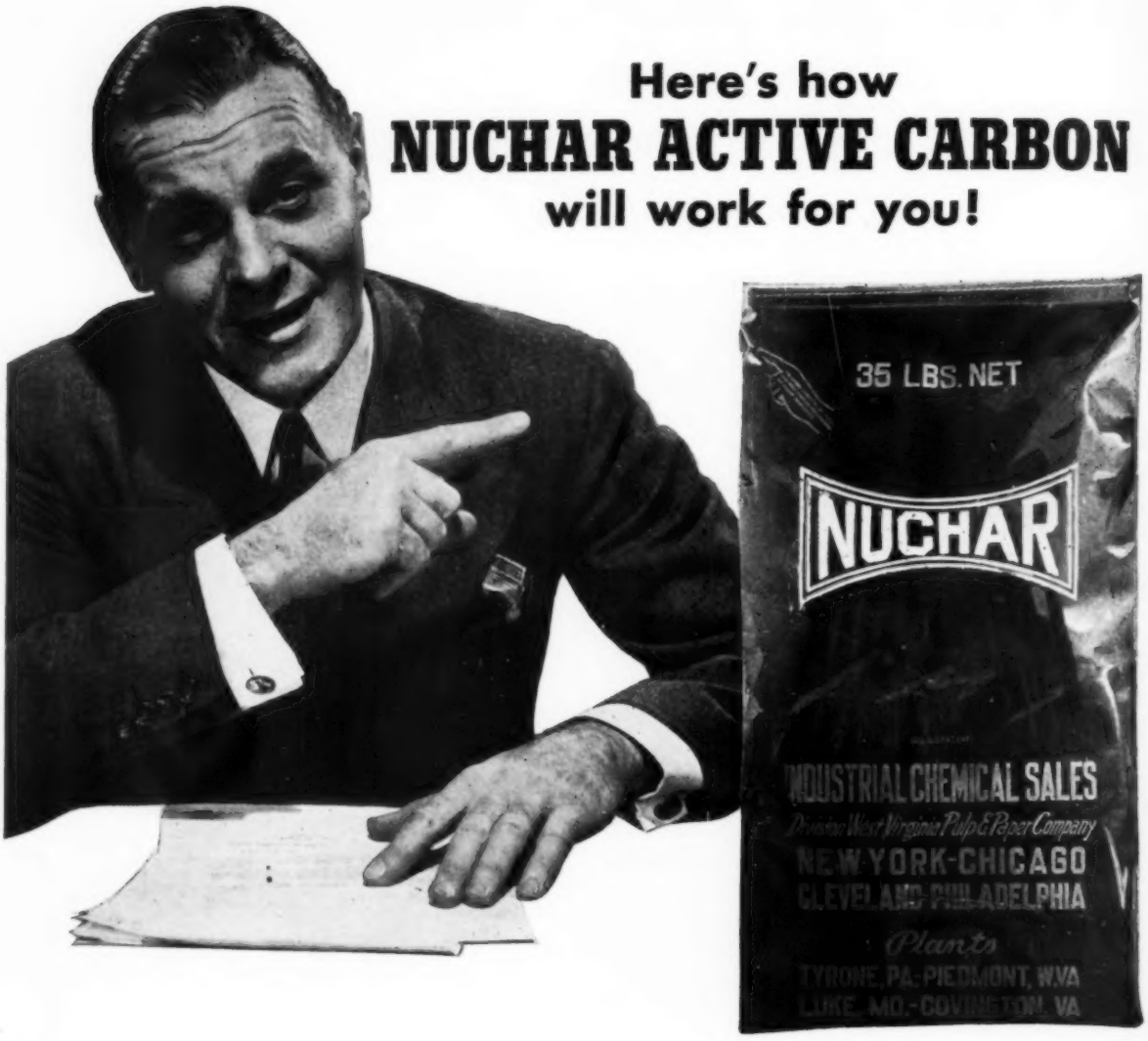
ARMY E NAVY

**TRIANGLE PACKAGE MACHINERY CO.**

913 NO. SPAULDING AVENUE. CHICAGO

OFFICES IN PRINCIPAL CITIES UNITED STATES AND CANADA

# Here's how
# NUCHAR ACTIVE CARBON
## will work for you!




The soap industry is putting to work in its plants the tremendous surface area of Nuchar Active Carbon for removing impurities from oils, fats and waxes.

Soap manufacturers rely on Nuchar Active Carbon as an effective and dependable means of purification *by adsorption*, to remove unwanted odors, colors and tastes in their products. Because it is chemically inert, Nuchar Active Carbon will free 'off' oils, fats, and waxes of unwanted impurities without causing any molecular alteration or chemical reaction.

Your technical staff will find active carbon a useful tool in your processes. Consult with us regarding the quality of Nuchar best fitted to your needs and we will send you a sample.

NUCHAR

**INDUSTRIAL CHEMICAL SALES**

DIVISION WEST VIRGINIA PULP & PAPER COMPANY

230 PARK AVENUE, NEW YORK 17, N.Y. | 35 E. WACKER DRIVE, CHICAGO 1, ILLINOIS | 748 PUBLIC LEDGER BLDG., PHILADELPHIA 6, PA. | 844 LEADER BLDG., CLEVELAND 14, OHIO

# Manufacture of Liquid Soap

ALTHOUGH coconut and palm-kernel oils have been those most used in making liquid soap, castor oil gives a very easily soluble soap and is superior in this respect to any other oil. Sulfonated castor oil is sometimes added to increase the fluidity of liquid soap. Linseed and soybean oils can be used in making insecticidal liquid soaps. Often more than one oil is used, in which case it is advantageous to keep the titre of the mixture low. The approximate titres of various oils are as follows:

Castor, 3° C.; Coconut, 20° C.; Linseed, 19° C.; Olive, 21° C.; Palm kernel, 22° C.; Soybean, 21° C., and Tallow, 44° C. The fluidity of liquid soap is increased by adding alcohol.

### Saponifying Agents

The amount of alkali needed to saponify a fat charge is calculated from the saponification value, which varies with the free fatty acid content of the oil. When castor-oil fatty acids are included in a charge, the carboxylic-acid group may have combined with the alcohol or hydroxy group to give a closed anhydride. If this has happened the acid value will be low and no longer an indication of the percentage of free fatty acids present.

Caustic potash is commonly used for saponification, though a mixture with caustic soda will also serve. Sodium oleate is sufficiently soluble in water to give a liquid soap, but if fatty acids of higher titre than oleic are present their sodium salts are not sufficiently soluble and only potash, ammonia or triethanolamine should be used. Ammonia soaps are mainly used for laundry work and triethanolamine soaps for shampoos.

### Method of Manufacture

Liquid soap may be made by the semiboiled or cold process if fatty acids are used. In the cold process saponification takes place just above the melting point of the fat, and in the semiboiled process at 70-80° C. After saponification the concentration of soap is adjusted to about 40 per cent and the soap is then left for as long a period as practicable for settling.

Turbidity, the difficulty most frequently encountered, is particularly objectionable in liquid toilet soaps and shampoos. It may arise from low solubility of the soap, indicating that the fat or blend of fats has not been suitable, or too high a percentage of neutral fat or fatty acid may have been used. The latter condition is overcome by the addition of isopropyl or denatured alcohol.

The liquid soap should be allowed to settle at least two days before filtering. Addition of sodium hexametaphosphate or sodium pyrophosphate to the filtered soap should help to prevent precipitation of calcium and magnesium soaps.

An emollient is desirable in liquid soap, glycerine being very good for the purpose, being present of course when oils rather than fatty acids are used in the fat charge. Substitutes which have been used in place of glycerine include the alkyl cellulose such as methyl cellulose, ethylene glycol, diethylene glycol, and the ethyl and butyl ethers of the glycols.

### Perfume

The natural odor of soaps made from coconut, castor and similar oils is not pleasant and should be covered, at least in toilet soaps and shampoos. A citronella type of perfume is popular. This should be added after saponification and may be incorporated with the aid of an emulsifier if necessary.

### Soapless Detergents

Of the alkyl sulfates, those rich in lauric acid are more soluble than when higher fatty acids are present. It is claimed that sulfates of secondary fatty alcohols are more soluble than those of primary alcohols. The secondary alcohols are obtained from petroleum derivatives, the primary from vegetable oils. The sodium, triethanolamine or ammonium salts may be used to give clear solutions at high concentrations.

Filtration after several days' settling is advisable even with these detergents. Clouding may be caused by a high proportion of unsulfated alcohols, or poor fractionation of the original alcohols, resulting in the presence of alcohols whose sulfates are less soluble. To overcome these faults, the amount of denatured alcohol in the finished product should be increased.

Basic formulas for different types of liquid soaps are as follows:

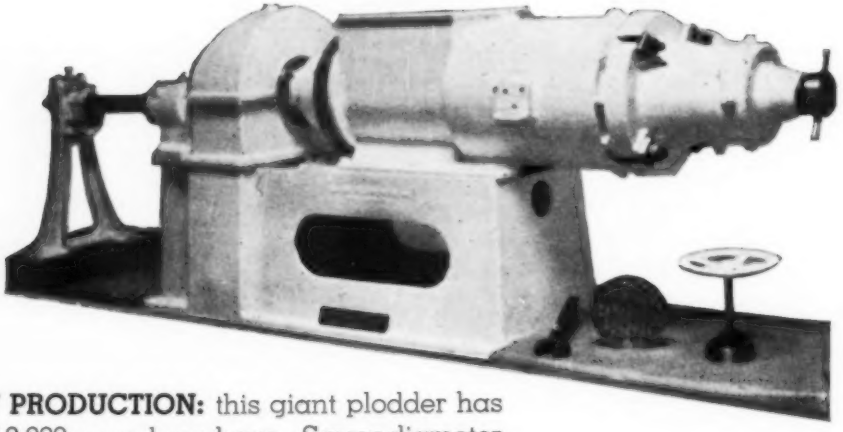
1. Castor Oil Soap

| | *Parts* |
|---|---|
| Castor oil fatty acids.... | 1000 |
| Caustic soda ..... | 64 |
| Water ..... | 200 |

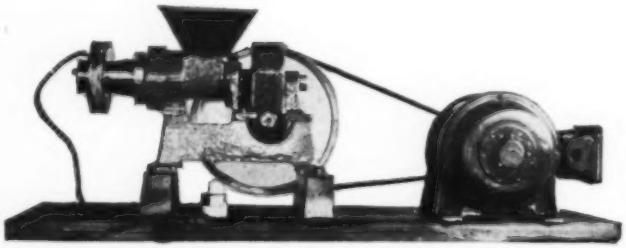
# HOUCHIN PLODDERS

## *From the Smallest to the Largest*

**are built to give years of efficient service in all kinds of soap manufacture.**

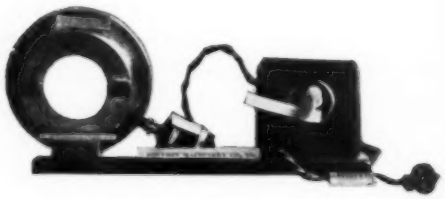


**FOR HEAVY PRODUCTION:** this giant plodder has a capacity of 3,000 pounds an hour. Screw diameter is 14 inches. Other sizes have 4 inch to 12 inch screws.



**FOR MAKING SAMPLE CAKES** of soap, by manufacturers of soap, perfume and color. This small plodder has a 2½ inch bronze screw, plated front head, screen and plate holder, and an electric heater.

**ELECTRIC HEATERS,** for front of plodder, give more uniform heating than gas, steam or lamp, without blistering the soap. Furnished with all plodders.



# HOUCHIN

## MACHINERY COMPANY, INC.

**Manufacturers of soap making equipment**

**SIXTH AND VAN WINKLE AVES.** **HAWTHORNE, N. J.**

2. Oleic Acid Soap

| | |
|---|---|
| Oleic acid | 1000 |
| Coconut oil | 175 |
| Caustic potash | 245 |
| Water | 400 |
| Glycerine | 50 |
| Alcohol if needed for clarity | |

3. Soapless Detergent

| | |
|---|---|
| Alkyl sulfate solution, 20-25% | 700 |
| Water | 250 |
| Alcohol | 50 |

4. Solvent Soap

| | |
|---|---|
| Castor oil | 250 |
| Caustic potash | 44 |
| Water | 800 |
| Trichloroethylene | 110 |

5. Solvent Soap

| | |
|---|---|
| Oleic acid | 250 |
| Triethanolamine | 125 |
| Water | 1000 |
| Alcohol | 125 |
| Glycol or glycol ether | 30 |
| Ethylene dichloride | 115 |

In these formulas the amount of saponifying agent required will vary with the quality of the oil. In these examples the saponification values of the neutral oils or of 100 per cent fatty acids have been used for calculation. James L. Boyle. *Manufacturing Chemist* 15, 88-90 (1944).

# Sampling Mixed Waxes

*By Nelson F. Murphy*
*Syracuse University*

THE wax mixture commonly used in the manufacture of candles is paraffin and stearic acid. It is well known that the melting point diagrams of these mixtures show eutectic[1]. This mixture in a candle machine, crystalizes with a variable composition throughout the candle. Since the per cent stearic is usually low in these candle mixtures, there is a tendency for the stearic acid to concentrate toward the center of the candle.

It is true that this is a common characteristic of mixtures showing a eutectic, but apparently the behavior among waxes has been overlooked in literature dealing with candle analysis. As a result, no uniform procedure of sampling candles has been established.

In order to demonstrate the variations that may occur when various methods of sampling are used, the tests shown in Table No. 1 were carried out.

**Table 1**

Neutralization Value of Mixed Stearic Acid-Paraffin Candles

| *Method of Obtaining Sample* | *Neutralization Value* |
|---|---|
| By scraping the outside of the candle | 48.2 |
| Cross section from the lower end of the candle | 60.0 |
| Cross section from the middle of the candle | 63.0 |
| Well-mixed chopped whole candle | 62.9 |

It is obvious from this table that the method of sampling mixed waxes is of importance, especially for those cases where analysis is included in the specifications[2]. In our laboratory we have found it is preferable and satisfactory to completely disintegrate the whole candle into fine particles (about 8 mesh) and to mix thoroughly. We also, as an alternative, suggest that the complete candle may be melted to a temperature not over 20° C. above the melting point, mixed thoroughly and the portion removed for weighing with a spoon previously warmed to a temperature slightly above that of the molten wax. One must be careful, however, that the spoon is not heated to too high a temperature where decomposition of the waxes may result. This latter method of sampling is not as satisfactory as disintegration of the solid candle because the molten wax will solidify in the weighing bottle, making it necessary to use hot solvents for removal of the weighed sample.

We wish to thank the Mack, Miller Candle Company for their participation in this work.

**References**

[1] Lewkowitsch; "Chemical Technology and Analysis of Oils, Fats, and Waxes. 3, 276-278, 1923, Macmillan and Company.
[2] Federal Specifications for Candles, Federal Standard Stock Candle C-C-91, 66, 1933.

### Soap in Greases

Soap-containing greases are among the most frequently used lubricants for the bearings of heavy engines. One recently patented water-resistant grease contains a lead soap as well as a sodium soap. The product is made by saponifying fish oil dissolved in lubricating oil, with litharge, and then with lye at a higher temperature. It is especially suitable for open machinery since it is tenacious and resistant to centrifugal force. Another recently proposed soap-containing grease contains a lithium soap, which improves its resistance to water, pressure and heat. Additional sodium soap is included.

The presence of even a small amount of water in soda-base greases renders them useless at high temperatures, presumably because of the formation of steam. If this water is driven off by heating the grease to high temperatures previous to use, a crumbly material of poor texture results. A plasticizing agent such as glycerine or oxidized pitch helps to prevent this. A typical formula contains 40-50 per cent tallow soap, 40-50 per cent oil and 2 per cent of glycerine.

To prevent oxidation and the formation of a hard crust, phenols are used in slightly acid greases, and amines such as naphthylamines in slightly alkaline greases. *Chem. Trade J. & Chem. Engineer* 114, 250 (1944).

### Stabilization of Fats

By the addition of suitable, carefully selected, edible antioxidants capable of exerting a synergistic effect, it is possible to increase the stability of lard and edible tallow to such an extent that it compares favorably with the best of the fats available. R. W. Riemenschneider, J. Turer, P. A. Wells, and W. C. Ault. *Oil & Soap* 21, 47-50 (1944).

### Fatty Acids of Lecithin

The fatty acid composition of lecithin prepared from crude soybean phosphatides was as follows: palmitic acid 15.6 per cent, stearic 6.3, oleic 13, linoleic 62.9 and linolenic 2 per cent. M. H. Thornton, C. S. Johnson and M. A. Ewan. *Oil & Soap* 21, 85-7 (1944).

# A POST-WAR PLANNER

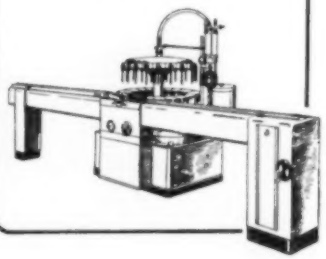
ACTS *To-day*

. . . NOT TOMORROW!

**Completely automatic, semi-automatic, hand-fed equipment to clean, fill, close, convey jars, bottles, tins, collapsible tubes.**

●

**Filters Pumps Percolators**



Who knows? The war **may** last for years . . . **may** end suddenly any day.

This we **do** know: reconversion will, in most cases, be quick.

Therefore: "organize" your post-war planning NOW in order not to be left at the post.

Every day, more and more manufacturers are lodging requirements for bottling and packaging machinery with The Karl Kiefer Machine Co. for post-war construction and delivery.

Plan for post-war **today.**

## THE KARL KIEFER MACHINE CO.

NEW YORK
BOSTON
CHICAGO

**CINCINNATI, U. S. A.**

SAN FRANCISCO
SEATTLE
LOS ANGELES

LONDON, ENGLAND

### Consistency of Fats

No standard method exists for evaluating the highly important property of consistency in plastic fats. Melting points, setting points, titers, etc., are more or less related to consistency, but singly or combined, they fail to give an adequate picture of the body of a fat over the entire range of temperatures at which it is to be stored or used.

An improved micropenetrometer is described and a standard technique proposed for measuring the consistency of fats with a high degree of precision. Data so obtained are given for cottonseed, peanut, and soybean oils hydrogenated to different degrees, as well as on cottonseed oil blended with various proportions of highly hydrogenated oil. The theory of the plasticity of fats is briefly discussed. R. O. Feuge and A. E. Baildy. *Oil & Soap* 21, 78-84 (1944).

### Mixed Alkalies in Soap

The substitution of caustic potash for 40 per cent of the caustic soda in the production of soaps from rosin, naphthenes, and sunflower-seed oil, did not affect the detergency of the soap. The potash decreased the hardness and the solubility of soap made from hardened fat.

The effect of mixed caustic soda and potash in the proportions in which they are present in the alkalies recovered from the nephelite wastes from apatite indicated that alkalies from apatite can be added to paste soaps only if mixed with ordinary caustic soda. They can be used in the production of liquid soap, but are not recommended for making toilet soap because they form a film on the soap and cause some difficulties in stamping the soap. V. N. Savvina and M. A. Rozhdestvenskaya. Khim. Referat. Zhur. 4, No. 9, 136-6; through Chem. Abs.

### Fatty Acids of Babassu Oil

The fatty acids of babassu oil were determined and found to be in terms of molar percentages: caproic acid 0.3, caprylic 7.1, capric 8.3, lauric 47.3, myristic 14.5, palmitic 7.1, stearic 2.0, arachidic 0.1, oleic 12.2, and linoleic acid 1.1. The molar proportion of tri-saturated glycerides found was 67.3 per cent, which is close to the proportion calculated on the assumption that all of the acids in babassu oil are distributed at random. A similarity in fatty-acid composition exists between babassu oil and seed fats of other members of the palm-tree family. F. L. Jackson and H. E. Longenecker. *Oil & Soap* 21, 73-5 (1944).

### Refining by Extraction

Oils containing free fatty acids are refined by mixing with a liquefied hydrocarbon such as liquefied propane, and a selective solvent for the fatty acids which is immiscible with the oil in the presence of the liquefied hydrocarbon, such as isopropyl alcohol containing 5-20 per cent of water. The materials are maintained under sufficient pressure to keep the hydrocarbon in liquid form, in order to produce a liquid extract phase containing the selective solvent and free fatty acids, and a second phase containing all of the glycerides. These phases are separated by their difference in specific gravity. F. J. Ewing, to Refining, Inc. U. S. Patent No. 2,329,889.

### Fatty Acids from Olefins

Olefins are catalytically treated with carbon monoxide and hydrogen. The resulting aliphatic aldehydes having 10-20 carbon atoms are oxidized at 10-25°C., in the presence of a solvent or of diluents, with air or other oxygen-containing gases. The resulting fatty acids are suitable for making soap. L. Mannes and L. Koehler, to Henkel & Cie, G.m.b.H. German Patent No. 734,219.

### Soap Recovery in Wash Water

Fats in used soap solutions can be recovered by decomposition with acids, precipitation with calcium salts, or by the use of filters containing zinc oxide. The dirt is removed from the used soap solutions by the addition of salt and blowing with air. The air bubbles formed absorb the soap, which can be separated by centrifuging and converted into a washing agent. B. Walther. Deut. Waschereі-Forsch.-Ber. 8, 71-2, 84, 86-7; through Chem. Abs.

### Peroxide Formation

A study of the reaction time and the effect of oxygen on the determination of peroxides in fat by the acetic acid-potassium iodide method shows that a one-hour reaction time in the absence of oxygen is necessary, especially on samples of high peroxide content.

The formation of peroxides at 100°, 75°, 55°, 35° and 15° shows a progressive increase in the maximum peroxide value reached, as the temperature is lowered to 35°. At 15° the maximum is the same as at 35°; this value is over 30 per cent of what it would be if all of the double bonds were converted to peroxide. The agreement between actual peroxide content and theoretical peroxide calculated from the decrease in iodine number extends to higher peroxide values as the temperature is decreased. The rate of decomposition or disappearance of peroxide at 100°, 75°, 55° and 35° agrees best with that of a bimolecular reaction, although definite exceptions exist. The speed of decomposition of peroxide becomes progressively greater as the degree of oxidation is increased. The changes in unsaturation, hydroxyl number and acid number are small compared to the decrease in peroxide value as the peroxide decomposes. R. F. Paschke and D. H. Wheeler. *Oil & Soap* 21, 52-7 (1944).

### Surface-tension Studies

The surface tension of sodium stearate and oleate dispersions in mineral oils of high and low viscosity was measured over a range of temperature from 20 to 160°C. The surface activity of the soap is closely related to its physical state. In dispersions in the nonpolar oil, no surface activity is shown by the soap until the full melting point is reached, whereas in an oil of relatively high polarity, surface activity is shown at much lower temperatures corresponding to the partial melting point. The ability of the soap to lower the surface tension depends on the degree of dispersion, the relation of surface activity to physical state and phase transitions. The addition of glycerol increases the surface activity at a given concentration but the tempera-

ture at which surface activity is attained remains unaffected. Excess fatty acid acts similarly to glycerol, but excess alkali decreases surface activity. W. Gallay and I. E. Puddington. Can. J. Research 21B, 225-9.

### Hydrocarbon Fatty Acids

Fatty acids are obtained from hydrocarbon oxidation products which contain 30-60 per cent of saponifiable components. The fractions boiling at 150-290°C. are driven out by steam distillation at a pressure of 2-8 mm. of mercury. The remaining carboxylic acids are freed of unsaponifiable constituents in the usual way. Fatty acids are obtained which are valuable for soap making. Maerkische Seifen-Ind. German Patent No. 734,273.

### Sulfated Oils

Fats and oils and their fatty acids and fatty esters are sulfated to give a crude sulfation mass. This is dispersed in at least an equal volume of an anhydrous organic solvent such as alcohol, it is neutralized with caustic soda, and the solvent and water are simultaneously removed by distillation. This leaves anhydrous, salt-free sulfated products. K. T. Steik, to National Oil Products Co. U. S. Patent No. 2,328,931.

### The Bellier Index

The Bellier index of a fat is the temperature at which the solid fatty acid begins to crystallize from a 70 per cent alcohol solution acidified with acetic acid, when the solution is slowly cooled with constant agitation. The values are useful in studying mixtures of two oils. M. de Mingo and J. M. Romero. Ion 3, 329-35; through Chem. Abs.

### Glycerine Substitute

A mixture of 33.3 per cent of magnesium chloride hexahydrate and 34.5 per cent of urea of specific gravity 1.247, is recommended as a substitute for glycerine for pharmaceutical use and for purposes of lowering freezing points. One part of the above mixture and two parts of water freeze at 12°C. H. van den Dool and P. C. Steyne. Pharm. Weekblad 79, 612-13.

### Wetting Power against Oil

Measurement of the contact angle of various mineral oils on surfaces of sodium soaps showed no appreciable variation with oils of varying polarity. Oils of low viscosity show a lower interfacial tension against water, and greater emulsion stability. Mineral oils which show little tendency to wet and spread on a soap surface possess high spreading power on soap surfaces previously wet with glycerol. As a result, mineral oils are absorbed rapidly by a soap-glycerol gel with subsequent displacement of glycerol. Droplets of displaced glycerol are not readily visible but can be made so by the use of methylene blue. Data are shown for some quantitative measurements of this preferential wetting action.

Greases having a sodium soap base made from fats and alkali show displaced droplets of glycerol when treated with mineral oil, whereas these soaps made from fatty acids and alkali do not. Thus the presence of glycerol in a grease having sodium soap base enables a nonpolar oil to wet the soap. W. Gallay, I. E. Puddington and J. S. Tapp. Can. J. Research 21B, 230-5.

### Soybean Oil Study

By determining the fatty acid composition of a large number of samples of soybean oil, in which the iodine numbers were distributed over a wide range of values, the relation between iodine number and the percentage of each of the fatty acids was determined by the use of statistical methods. The principal variation is the large decrease in oleic acid and the large increase in linoleic acid with increasing iodine number. From the relations determined it is possible to estimate the fatty acid composition of a soybean oil from a determination of its iodine number. C. R. Scholfield and W. C. Bull. *Oil & Soap* 21, 87-9 (1944).

### New Antioxidant

Gum guaiac has been reported to possess antioxygenic properties. The active principle in the gum is presumably guaiaretic acid. Nordihydroguaiaretic acid also has marked antioxidant characteristics. It is readily obtained in substantial yields from a common plant, *Larrea divaricata*, and compares favorably with other highly effective inhibitors of the phenolic type. The compound is more soluble in fats than hydroquinone but not as soluble as the tocopherols. It appears to have no deleterious effects in lard. W. O. Lundberg, H. O. Halvorson and G. O. Burr. *Oil & Soap* 21, 33-35 (1944).

### Adsorption of Alkyl Sulfate

Some indication of the variations in the adhesion tension between a detergent solution and a textile fiber may be obtained by measuring the extent to which various detergents are adsorbed by textile fibers under different conditions.

The adsorption of sodium alkyl sulfates by wool is shown to involve the single long-chain alkyl sulfate ion. This ion reacts with the basic groups present in wool and behaves as a colorless dye, in that the adsorbed ions cannot be removed by a simple washing process. Up to 2.5 per cent of the alkyl sulfates are adsorbed under neutral conditions, based on the weight of fiber. The extent of the adsorption increases with increasing hydrogen-ion concentration. The extent and rate of adsorption are increased by the addition of electrolytes, the ion of sign opposite to that of the long-chain ion being responsible. As in the case of the effect on the interfacial tensions, the univalent ions fall into a lyotropic series. Similar effects are observed with other textile fibers. R. G. Aickin. *J. Soc. Dyers & Colourists* 60, 60-5 (1944).

### Light Absorption in Soap

A study of sodium oleate solutions shows that Beer's law does not hold, but that instead absorption of light is almost independent of concentration. The absorption of light at any one concentration is different in different samples of the same soap solution. This behavior is shown to be due to orientation of the colloidal micelles, through previous flow of the liquid. Other observations show that the absorption of light by some molecules depends on the direction in which the light passes through them. M. E. McBain.. *J. Phys. Chem.* 48, 89-95 (1944).

ADVERTISEMENT—*This entire page is a paid advertisement.* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

# U.S.I. CHEMICAL NEWS

May ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1944

## Alkyd Allocations Tightened Further

### New Resin Specifications Can Be Met with Other U.S.I. Products

Heavy military demand for certain products requiring phthalic anhydride in their manufacture have necessitated a reduction in the amount of this chemical allocated for use in alkyd resins. Thus it is predicted that alkyd resins will be allocated only for the most critical end uses.

**Maritime Commission**

The Maritime Commission is reported to have given notice that after May 1st the use of alkyd resins will be permitted only in their interior and exterior primers and in their low visibility exterior paints. S&W Aroplaz 1244, U.S.I.'s 52-MC-21 resin, will, therefore, still be allowed for use in Maritime Specifications 52-MC-23 and 52-MC-29 primers and S&W Aroplaz 1328 for use in MC-52-A1, Class XXII, red lead primer. S&W Aroplaz 1240, the 52-R-13 resin, will also still be allowed for use in exterior finishes such as Specifications 52-MC-5 and 52-MC-6. However, the majority of interior finishes will be based on an oleoresinous vehicle meeting requirements of Specification 52-MC-7. Arochem 365 is recommended for use in the compounding of this vehicle.

**Armed Services**

As a conservation measure, the Armed Service Forces also are revising many of their coating requirements. Many types of equipment such as tool kits, first-aid kits, metal bins, tables, blitz cans, and other metal equipment, formerly finished with an alkyd primer followed by an alkyd finish coat, will now be finished with a single coat of Specification 3-181 enamel; olive drab, rust inhibiting. Aroplaz 1320 is the U.S.I. vehicle for use in this specification.

Other equipment such as wooden carrying equipment, desks, antenna masts, etc., formerly coated with one coat of each of Specification ES-680A, Classes 638, 101 and 204, will now be coated with one coat of ES-680A, Class 638 followed by a coat each of AXS-750 and AXS-752, semi-alkyd finishes. ES-680A, Class 638 can be formulated with U.S.I. Aroplaz 1323, while AXS-750 and 752 requirements can be met by the use of Aroplaz S-313 or a 50/50 blend of Aroplaz 1323 and a 20 gallon oil length Ester Gum C varnish.

The U. S. Navy Department Bureau of Ships is now considering the revision of their interior fire retardant paint Specification 52-P-22 to replace the alkyd with more available materials. No definite decision has been made on this as yet, however, so the 52-R-13 alkyd resin (Aroplaz 1240) will be the required vehicle until further notice.

## *Novel Anti-Freeze Use Protects Gas Pipe Lines*

In the Louisiana natural gas fields, a pipe line company has installed alcohol injectors to guard against freezing of hydrates in the line, should the dehydration plant be out of service. About one gallon of alcohol per million cubic feet of gas is required to provide this stand-by protection.

# Fast-Advancing Textile Field Steps Up Use of U.S.I. Products

### New Finishing and Coating Processes Call for Ethanol, Acetone, Other Solvents and Chemicals

Wind- and water-proof materials for Arctic service, oil-proof fabrics for plane parts, shrink-proof socks for soldiers — these are but suggestions of how the products of a wide-awake textile industry are serving the war effort. Many of these new fabrics were developed to solve specific war problems, or to meet the shortage of rubber and other materials. With few exceptions, however, they are here to stay, despite the return of natural rubber and the lifting of other war restrictions.

Washable, dry-cleanable fabrics that remain water-proof and retain their soft handle will be standard for a wide range of clothing. Flex-resistant, non-flammable fabrics will upholster plane, train, and automobile seats. Crack-proof, leather-like cloth tippings will adorn shoes. Odorless, non-toxic cloth package liners will protect solid and liquid foods. Specialty textiles of almost limitless variety will contribute to the comfort, convenience, and economy of postwar living.

**Application, Manufacture**

In the application of many new textile coatings, such U.S.I. solvents as ethanol, acetone and ethyl acetate are indispensable. In the manufacture of the coatings themselves, dibutyl phthalate and other U.S.I. plasticizers and solvents play many essential roles. And, of course, in many of the older textile manufacturing and finishing processes, huge tonnages of U.S.I. products are consumed: acetone as the solvent in which Rayon and Vinyon are extruded; dibutyl phthalate for fiber lubrication; acetone and alcohol for making "fused" shirt collars and as degumming agents and dyeing assistants, etc.

That the field for further textile development is still wide open, however, is graphic-

*(Continued on next page)*

## *Uses Conduction Heating in Setting Plastic Glue*

The use of high-frequency electric currents to *in*duce heat in hot-setting plastic glues, while relatively new, has reached a high state of development and is now much used in making plywood and other materials. A new development, however, is the use of *con*duction heating, as recently reported by a Canadian scientist.

There appears to be no limit in the size of wood which can be joined. And the time required is astonishingly short. Built-up wooden propellers, it is said, are "welded" in 5 minutes, an operation which formerly required 8½ days.

The plastic glue used in made electrically conductive by the addition of acetylene black which is said not to affect the strength of the joints.

## Fog and Frost Preventive

A composition said to be effective in preventing the formation of fog and frost on windows, goggles and other glass surfaces has recently been patented. The patent covers the use of an alkali, ammonia, or organic base salt of a sulfated higher alcohol, and a water-soluble solvent such as a 10 to 1 ethanol-acetone mixture.

**What a contrast in style the Yeomanette of 1918 and the 1944 WAVE present! The contrast in the textiles of which their uniforms are made is almost as great. The success of the textile industry in developing more serviceable, more suitable fabrics is reflected in wide range of war products—from uniforms to tank tarpaulins.**

ADVERTISEMENT—*This entire page is a paid advertisement.*

May ★ **U.S.I. CHEMICAL NEWS** ★ 1944

## *Textile Field*

(*Continued from preceding page*)

ally shown by a review of recent patents. Here are listed a few of the more interesting ones involving U.S.I. products:

### Waterproofing

In the water-repellent coatings field, one patent describes the synthesis of such compounds as hexane-bis (*N*-octadecylamidomethylenepyrinidium chloride) and their application in ethanol solutions to impregnate cellulose textiles. Another covers a water-in-oil emulsion containing butyl alcohol, along with a solvent-soluble urea-formaldehyde condensate, solvent-soluble ethyl cellulose, a water-insoluble wax, and an aluminum soap.

A third patent in this field describes the dispersing in ether of a gel formed from a benzene or naphtha vehicle and an aluminum soap, and mixing with a volatile vehicle — for waterproofing felt hats. For both felt and straw hats, a patent awarded to the same inventors covers the dispersion of a similar gel by a peptizing agent such as acetone. A fifth important patent covers the use of an emulsion of an ester of a cellulose ethyl ether in volatile organic solvent, so as to leave an insufficient amount of impregnating material to form a continuous coating over the textile. In still a sixth patent, anhydrous ethanol serves as the reaction medium in the production of polyguanidines for improving the dyeing properties and water repellency of fabrics.

### Shrinkproofing

The shrinkproofing of wool with alcoholic caustic potash, recently described in these columns, is another development of interest. Up to 65 percent reductions in the felting shrinkage of wool socks have been made without significant loss of strength.

### Mothproofing

Numerous recent patents of mothproofing agents involve the use of U.S.I. solvents. One, assigned to the Government, is isonitrosoacetanilide in acetone solution, along with various other compounds.

Another patent calls for the use of butanol in a method for treating fibers to facilitate impregnation with fungicides. A British patent on laminated fabrics suggests ethanol as the solvent for the plasticizer. Two German patents for increasing the elasticity of acetate rayon describe a mixture of ethyl acetate and chloroform as the treating agent.

An American patent on the stabilization of knitted cellulose fabrics (to prevent shape distortion in use) employs a condensate of urea, formaldehyde and ethylene glycol or ethanol. Another on the treatment of airplane fabrics to prevent damage from gasoline, etc., names ethanol as one of the solvents for the film-forming agent; the fabric is shrunk into place on its mounting as the solvent evaporates. Dibutyl phthalate can serve as the plasticizer in yet another patent on the finishing of fabrics with ethyl cellulose — to impart soft handle and imperviousness to moisture and air.

## *Acetone Employed in Extracting Vitamin K*

Alfalfa, chestnut tree leaves, and pig livers are used as the source of vitamin K in a process developed by a Russian scientist and recently reported in an English journal. The process involves the extraction of the vitamin with acetone and subsequent purification to remove colored substances and other unwanted constituents dissolved out by the acetone.

The extract is first heated and treated with petroleum ether and with 90 per cent methanol, and the methanol extract discarded. The ether fraction is transferred into alcohol and cooled to 0 C, and the resulting precipitate filtered out. The filtrate is then evaporated and the remainder treated with petroleum ether and 90 per cent acetic acid. Again the ether fraction is transferred into alcohol, cooled with "Dry Ice" and filtered. The fatty fluid resulting contains about 36 per cent of the vitamin K originally present in the starting material.

## *A. J. Wittenberg Resigns as Vice-President of U.S.I.*

U. S. Industrial Chemicals, Inc. announces with regret the resignation, as of April 14, 1944, of Mr. A. J. Wittenberg, Vice-President of the Company and Director of the Stroock & Wittenberg Division.

Mr. Wittenberg joined the Company in 1938 when the Stroock & Wittenberg Corporation became a wholly owned subsidiary of U.S.I.

To further consolidate U.S.I.'s plans for expansion, development and diversification in the chemical field, the natural and synthetic resin business of Stroock & Wittenberg, with the same personnel and offices, was sometime ago made an integral part of U.S.I. and is being conducted in the name of U. S. Industrial Chemicals, Inc.

## TECHNICAL DEVELOPMENTS

*Further information on these items may be obtained by writing to U.S.I.*

**The unpleasant odor** of cod and other fish liver oils, it is claimed, can be masked or effectively modified by a new product now being offered to manufacturers of cosmetics, etc. (No. 809)

U S I

**A molasses distillers product,** in liquid form and containing 45 per cent solubles, has recently been made available without allocation requirements. The product is claimed to have possibilities as a sticking agent or binder for various industrial uses. (No. 810)

U S I

**Anti-corrosion films,** for highly polished steel surfaces, can be obtained with a new product which is diluted with acid-free mineral oil and applied cold, according to the maker. The new coating is said to pass standard tests against hydrobromic acid, salt spray and humidity. (No. 811)

U S I

**Ethyl chloroacetal** is reported to be available in 1 to 12-gallon glass containers for use in organic synthesis and the preparation of medicinals. A stable, water-white liquid, the product has a boiling range of 150 to 158 F and mixes with most organic liquids. Not miscible with water, glycerol, and higher aliphatics. (No. 812)

U S I

**A portable infra-red unit** has been developed for making "on the spot" heating and drying tests of chemicals, plastics, coatings, etc. Supplies from 70 to 400 F, operates on a-c or d-c. (No. 813)

U S I

**A new vitamin test kit** is described as providing fast, accurate determinations of vitamin A in fish liver and other types of oils. Utilizes extremely sensitive colormetric reaction. (No. 814)

U S I

**Cleaning Metal Surfaces,** after magnafluxing, is said to be facilitated by a new solvent of neutral pH and negligible toxicity. The rate of solvent recovery being high, the product should provide an economical means of removing oil and dye to provide a clean surface for painting, rust-proofing, etc. (No. 815)

U S I

**Stabilized dicalcium phosphate dehydrate,** recommended by the maker for medicinal uses and as a mineral substitute for foods, or a polishing ingredient in tooth pastes, is announced. Product is reported to retain water of crystallization and to remain free flowing during long storage under abnormal conditions. (No. 816)


**U.S.I INDUSTRIAL CHEMICALS, INC.**

60 EAST 42ND ST., NEW YORK 17, N. Y. — CHEMICALS, RESINS, ANTI-, SOLVENTS, ALCOHOLS, FREEZE — USI SERVICE TO INDUSTRY — BRANCHES IN ALL PRINCIPAL CITIES

**ALCOHOLS**
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined

**Ethanol (Ethyl Alcohol)**
Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96%, Absolute
°Super Pyro Anti-freeze
°Solox Proprietary Solvent

°**ANSOLS**
Ansol M
Ansol PR

**ACETIC ESTERS**
Amyl Acetate
Butyl Acetate
Ethyl Acetate

**OXALIC ESTERS**
Dibutyl Oxalate
Diethyl Oxalate

**PHTHALIC ESTERS**
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

**OTHER ESTERS**
°Diatol
Diethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

**INTERMEDIATES**
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate

**ETHERS**
Ethyl Ether
Ethyl Ether Absolute—A.C.S.

**RESINS**
Natural
Synthetic

**ACETONE**
Chemically Pure

**FEED CONCENTRATES**
°Curbay B-G
°Curbay Special Liquid
°Vacatone 40

**OTHER PRODUCTS**
Collodions
Ethylene
Ethylene Glycol
°Indalone
Nitrocellulose Solutions
Urethan

°Registered Trade Mark

# PRODUCTS AND PROCESSES

### Castor Oil Soap

Castor oil soap is made from 100 kilograms of castor oil, 15 of dry caustic soda, and 2.5 kg. of dry soda ash. The soda ash is added toward the end of the boiling.

To prepare soap from Turkey-red oil, place 20 kg. of castor oil in a barrel provided with a spigot at the bottom. Add 7.5 kg. of concentrated sulfuric acid in small fractions over a period of 5-6 hours, with constant stirring. The temperature should not rise above 25-30°C. On the following day drain the excess acid and wash with 60 liters of water. The next day wash twice with a 20 per cent solution of salt, using 60 liters each time. Allow the water to settle out, and drain. Neutralize with soda-ash solution containing 2.7 kg. in 34 liters of water. These soaps are especially effective for wool washing. A. M. Serebryakov. Tekstil. Prom. 1943, No. ½, 24.5.

### Alkaline Salt Cleanser

A cleansing composition in solid form contains the following: 85 per cent of a trisodium phosphate-sodium hypochlorite compound, 10 of anhydrous sodium pyrophosphate, and 5 per cent of sodium metaphosphate dried at 100°C. Lever Brothers & Unilever Ltd. and Richard Thomas. British Patent No. 550,020.

### Synthetic Detergent

Apparatus is described for the preparation of a sulfonated detergent from a slurry, such as one of sodium alkyl benzene sulfonate, containing about 20-50 per cent of solids. The slurry is fed onto a heated surface such as that of a drum drier to effect its preliminary drying and to form a continuous coherent film not more than 0.03 inch thick, and with a volatile content of about 5-12 per cent. The partially dried film is removed from the heated surface by notched knives and brought into contact with a hot circulating gas such as air at a temperature of 140°, and then with cool air. R. Riegler, to Allied Chemical & Dye Corp. U. S. Patent No. 2,330,922.

### Dustfree Granulated Soap

Granulated soap is treated with a solid water-dispersible coating agent such as "Carbowax," which is adapted to cause cohesion of the soap dust to the larger particles and so improve their resistance to disintegration by abrasion and impact. John W. Bodman, to Lever Bros. Co. U. S. Patent No. 2,329,694.

### Acid Shampoo

Sulfuric esters of the higher aliphatic fatty alcohols are used as a shampoo ingredient. Acidifying substances are added to the esters. E. Franz. German Patent No. 733,571.

### Soap Flakes

A soap containing approximately 11 per cent of water is mixed with an alkali per salt and disodium phosphate containing about 9 per cent of water. The mixture is then treated in the usual way. C. Kelber. German Patent No. 734,556.

### Bactericidal Cleaning Agent

A solution of cetyl trimethyl ammonium bromide, called "Cetavlon," diluted 1:10, is a good cleaning agent with a high bactericidal action. It is superior to soap and water for preoperative cleaning of the hands. Its action on industrial wounds and dirty burns is thorough and painless. T. D. Whittet. Chem. Products 7., 8.

### Shaving Preparations

Shaving soaps have the advantages of stable foam, agreeable effect on the skin, stability and economy in use, but do not soften the beard sufficiently. A slightly alkaline soap meets the requirements better than a superfatted soap. Shaving soaps in powdered form should be free from hygroscopic components and should be made without caustic potash. Lather shaving creams are made by a semihot process but complete saponification of the fats is necessary for stability. Latherless shaving creams are without effect on a tough beard.

Liquid shaving soaps are prepared semicold by using caustic potash exclusively for saponification, with addition of glycerol, alcohol and potassium carbonate to the soap solution. J. Grosser. Seifensieder-Ztg. 67, 245, 256, 266, 278.

### Insect Repellent

An insect repellent for civilian use against mosquitoes is as follows:

| | *Per cent* |
|---|---|
| Vanishing cream | 94 |
| Oil of citronella | 2 |
| Terpenyl acetate | 3.5 |
| Oil of cedar leaf | 0.2 |
| Oil of sandalwood | 0.3 |

The active ingredient in army insect repellents is not available for civilian use. *Drug & Cosmetic Ind.* 54, 344 (1944).

### Protective Hand Jelly

A glycerine hand jelly serves as a barrier to the deleterious action of various materials on the skin. It can be made by dissolving 20 grams of sodium citrate in 1 liter of water, adding 800 cc. of glycerine and 30 grams of calcium alginate. While calcium alginate alone is soluble in water, the sodium citrate helps to dissolve it to form a gel. Sodium hexametaphosphate and sodium tirpolyphosphate also aid in dissolving the alginate to give a clear gel. *Am. Perfumer* 46, No. 3 40 (1944).

### Alkalies in Cake Form

Alkaline cleaners are manufactured in cake or in pellet form from a mixture of crystallized sodium metasilicate, soda ash, and china clay, by the addition of sufficient water to cause the mixture to set in a solid mass. Addition of a surface-active agent, such as the salt of an alkyl sulfate or an alkyl aryl sulfate, is advantageous. A proportion of 3-4 per cent of this in the mixture will not interfere with the setting and hardening of the cake, but addition of the same amount of soap would. The setting process can be enhanced by the further addition of 5 per cent of calcium carbonate. E. Stern. British Patent No. 557,593.

ACKNOWLEDGED HIGHEST QUALITIES

# STEARIC ACID

(DISTILLED)

CAKE, FLAKE AND POWDERED
TECHNICAL AND U.S.P. GRADES

•

# OLEIC ACID

(RED OIL)

REFINED TALLOW FATTY ACIDS • WHITE OLEINE U.S.P. DOUBLE-DISTILLED

*We Recover All Glycerine for War Purposes*

*Manufacturers Since* 1837

# A. GROSS & CO.

295 Madison Avenue, New York, N. Y.
*Representatives in Various Cities*

# A PUMICE TO MEET EVERY NEED

Not until Valencia — the standard of American Pumice — was discovered at Grants, New Mexico, was it thought that a domestic pumice could match the quality of imported Italian Pumice. This inexhaustible deposit at Grants is true pumice stone and not a volcanic ash. It is physically and chemically equal in every respect to the now unobtainable Italian Pumice. • The Valencia plant's output of grades for every need is rigidly under control for particle size, purity, weight and color.

**Check this table comparing Valencia with the highest grade of imported Italian Pumice. See for yourself that Valencia is truly the standard of American Pumice.**

| | American Pulverized Per Cent | Italian Select Per Cent |
|---|---|---|
| Silica | 72.90 | 73.24 |
| Alumina | 11.28 | 10.61 |
| Iron Oxide | .86 | 1.57 |
| Titanium Oxide | .06 | .10 |
| Calcium Oxide | .80 | 1.10 |
| Magnesium Oxide | .36 | .40 |
| Soda | 3.64 | 3.03 |
| Potash | 4.38 | 5.58 |
| Sulphuric Anhydride | .03 | .05 |
| Loss on ignition | 5.20 | 4.04 |

**PUMICE CORPORATION OF AMERICA**
GRANTS, NEW MEXICO, U. S. A.
*DISTRIBUTED BY*
Whittaker, Clark & Daniels, Inc. • 260 West Broadway, New York City
Warehouses: Detroit, Michigan and South Kearny, N. J.

# NEW PATENTS

*Conducted by*

**Lancaster, Allwine & Rommel**

*Registered Attorneys*
PATENT AND TRADE MARK CAUSES

**402 Bowen Building, Washington, D. C.**

**Complete copies of any patents or trade-mark registration reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine & Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.**

**No. 2,343,359,** Spray Material and Method of Making the Same, patented March 7, 1944 by Robert B. Arnold, Stonewall Courts, Va., assignor to Tobacco By-Products and Chemical Corp., Louisville. An insecticide material suitable for use in making aqueous insecticidal combination sprays, comprising essentially a dry, solid, comminuted base-exchange material in chemical combination with an alkaloid selected from the group consisting of nicotine, nornicotine, and anabasine, and constituting a water-insoluble salt of the alkaloid, said water-insoluble salt carrying an adsorbed adherent dry compound of water-soluble non-volatile alkaloid selected from said group, said adherent dry-compound being material selected from the group consisting of; (1) non-volatile mono-basic acid salts of the said alkaloid, (2) volatile poly-basic acid salts of said alkaloid, associated with a fixing component, the proportion of said water-soluble non-volatile alkaloid in said compound being in appreciable ratio relative to the amount of alkaloid in the water-insoluble salt.

**No. 2,343,415,** Pest Control, patented March 7, 1944 by Frank H. Kaufert, St. Paul, Minn., assignor to E. I. du Pont de Nemours & Company, Wilmington. A termite soil poisoning and disinfecting composition containing as an essential active ingredient 2-chloro-6-nitrotoluene and a carrier therefor.

**No. 2,343,651,** Cleansing and Polishing Medium for Dentifrices or the Like, patented March 7, 1944 by George T. Fielding, Stamford, Conn. A dentifrice containing hard wood particles, the dimension of the major portion of which across the grain is greater than that with the grain the faces of the major portion of the particles across the grain lying in substantially parallel planes, a face with the grain joining a face across the grain at an abrupt angle forming a scraping edge, and a detergent.

**No. 2,343,829,** Process for Making Soap and Product Thereof, patented March 7, 1944 by Benjamin Clayton, Houston, Tex., assignor, by mesne assignments, to Refining Unincorporated, a Texas partnership. The process of making soap pellets, which comprises, extruding under pressure a small element of plastic soap containing water and heated to a temperature sufficient to cause vaporization of water and formation of porous soap when said pressure is released, and cutting said element of porous soap into short lengths immediately upon extrusion.

**No. 2,344,105,** Exterminating Agent for Vermin, patented March 14, 1944 by Gerhard Peters, Frankfort-on-the-Main, Germany; vested in the Alien Property Custodian. Exterminating agent for animals and insects comprising trichloracetonitrile in admixture with methyl bromide.

**No. 2,344,268,** Cleaning Composition, patented March 14, 1944, by Harry D. Rench, Racine, Wis., assignor to Bigelow-Stanford Carpet Co., Thompsonville, Conn. A cleaning composition for removing from fabrics dirt adhered thereto by grease which consists of a mixture of approximately 20 mesh bentonite, approximately 60 mesh wood flour and a petroleum distillate grease solvent, the solvent being present in an amount between 4 and 7 gallons of solvent per 100 pounds of combined dry clay and wood flour to impart a moist powder consistency to the composition and the wood flour being present in an amount less than one-half the weight of the bentonite to inhibit lumping of the composition during storage.

**No. 2,345,307,** Detergent Composition, patented March 28, 1944 by Emil A. Vitalis, East Port Chester, Conn., assignor to American Cyanamid Company, New York. A detergent composition comprising a major proportion of soap consisting essentially of alkali metal salts of fatty acids, together with a quantity of an acidifying agent sufficient to reduce the alkalinity of the soap to a pH of 7.2-8 and about 3-30 per cent, based on the weight of the soap, of a surface-active agent containing a hydrophobic portion together with a hydrophilic portion, said hydrophobic portion containing a single long aliphatic radical of at least 8 carbon atoms.

◆

### Enzyme Digesters

Enzyme digesters are used by spotters for the removal of stains such as blood, albumen, starch, etc. The enzymes break down these substances so as to render them soluble and removable by wet spotting. Enzyme cleaners usually consist of a mixture, with each ingredient designed to attack a particular type of substance. If kept under the proper conditions they are very effective. Enzyme preparations should be stored in a cool place, preferably in a refrigerator, as most of them deteriorate when kept in a warm place.

In use, the digester is dusted lightly over the spot which has been previously moistened with water at about 110° F. The preparation is well worked in. The treated stain must not be allowed to dry, but must not be wet with water at too high a temperature. Above 125° F., a number of enzymes become inactive. Sufficient time should be allowed to permit the enzyme to do its work. This may take a half hour to an hour, a fact that is not always recognized. Another precaution to observe is to remove all soap residues such as might be left from wet cleaning, before the enzyme is used. Properly handled, these preparations become very useful. C. H. Bayley. Bull. Canadian Research Institute of Launderers and Cleaners, March, 1944.

◆

### Glycerine from Waste Matter

Methods of recovering glycerine from sulfonation liquors and from distillery wastes are described. Although substantial quantities of glycerine can be recovered from these by-products, the processes are probably not economically feasible under present conditions. R. N. DuPuis. *Oil & Soap* 21, 76-7 (1944).

# *Attention* — ALL SOAPERS!

*Use*

## UNITOL "R"

**THE REFINED TALL OIL**

(Fatty Acids and Rosin Acids)

1. **Substitute for Red Oil**
2. **High Rosin Replacement Value**
3. **Low Cost Raw Material**
4. **Available without Restriction**
5. **Easy to Use**

*Write for free sample and prices*

**UNION BAG & PAPER CORPORATION**

By-Products Department — Woolworth Building, New York 7, N. Y.

SARGENT'S DRYER and CHILLING ROLL
One of the latest Sargent installations, a unit capable of delivering 1300 pounds of extremely thin soap chips in 40 feet. Economy of operation and floor space are distinct features of this equipment. Mechanical refinements, compactness and accessibility are inherent characteristics. Write for complete details and specifications.
C. G. SARGENT'S SONS CORPORATION • GRANITEVILLE, MASSACHUSETTS

# EQUIPMENT AND BULLETINS

IF YOU want additional information on any of the items described below or if you want any of the bulletins, catalogs, etc., write to the MacNair-Dorland Co., Inc., 254 West 31st St., New York 1, mentioning the number of the item.

### 109—Synthetic Menthol

A collection of the literature concerning the pharmaceutical properties and uses of synthetic menthol has just been published by Givaudan-Delawanna, Inc., New York. The book is approximately 240 pages long and assembles from their original sources the text of twenty articles dealing with the pharmacological value of menthol and its isomers.

◆

### 110—Booklet on Waxes

International Wax Refining Co., Brooklyn, has just issued a folder listing and describing the waxes which it supplies. Specifications are included for a synthetic beeswax and a synthetic carnauba, as well as for a group of natural waxes. Copies of the booklet are available.

◆

### 111—Use of Adhesives

National Adhesives Division of National Starch Products, Inc., New York, has just issued a 24-page booklet covering the preparation and use of glues, pastes and gums. Adhesive use is treated from many different angles such as storage and care, thinning of prepared glues and pastes, selection of the proper type product, etc. Copies of the booklet are available to users of adhesives.

◆

### 112—Milwaukee Survey

*The Milwaukee Journal*, Milwaukee, Wis., has just issued its 21st annual report on product preferences of housewives in the Milwaukee district. As in previous years considerable space is given over to a review of the preferences of Milwaukee housewives for toilet and laundry soaps, cleaners, soap flakes, dish washing preparations, shaving cream, tooth paste, shampoo, bleaching fluid, etc. Copies may be obtained from the *Journal*.

◆

### 113—Bulletin on Waxes

F. W. Steadman Co., New York, has just issued a set of mimeographed sheets listing specifications for the waxes which it supplies. Described are a series of replacements for carnauba wax, montan wax, beeswax, ozokerite, japan wax, etc. Copies are available.

◆

### 114—Insecticide Bulletin

"Insecticides and Equipment for Controlling Insects on Fruits and Vegetables" is the title of a new publication of 52 pages issued by the U. S. Dept. of Agriculture as Misc. Pub. 526. Information is given on precautions in using insecticides; spray residue on plants; injury to plants by insecticides; preparation of sprays and dusts; quantity to apply; spraying and dusting equipment; care of insect control de-


*Vegetable Oleic Acids*

with unusually good emulsification and cleansing properties and good rinsability.

**DISTOLINE***

Emulsifies readily, and yields emulsions of highly stable character

**HELIOLINE***

Highly refined, water-clear, particularly suitable for dry cleaning soaps and other purposes where lack of residual odor is necessary

**WOBURN**

CHEMICAL CORP. (N. J.) Harrison, N. J.

*Reg. U. S. Pat. Off.

# CRESYLIC ACID — FORMALDEHYDE

## AROMATICS

| | |
|---|---|
| Phenyl Ethyl Alcohol | Phenyl Ethyl Acetate |
| Methyl Acetophenone | Amyl Cinnamic Aldehyde |
| Acetophenone | Benzyl Acetate |
| Geranyl Acetate | Benzophenone |
| Yara Yara | Nerolin |

For Soaps, Perfumes, Cosmetics, etc.

ASSOCIATED COMPANIES

KAY-FRIES CHEMICALS, INC. NEW YORK, N. Y.

CHARLES TENNANT & CO. (CANADA) LTD TORONTO, CANADA

**AMERICAN-BRITISH**
**CHEMICAL SUPPLIES, Inc.**
180 MADISON AVE., NEW YORK



# RAW MATERIALS FOR THE SOAP INDUSTRY

**COCOANUT FATTY ACIDS**
**VEGETABLE OIL FATTY ACIDS**
**ANIMAL AND FISH OIL FATTY ACIDS**

*THE LAMEPONS*

***Unique surface active agents for cosmetic and industrial use.***

| | | | | | |
|---|---|---|---|---|---|
| Castor Oil | Olive Oil Foots | Soya Bean Oil | Oleo Stearine | Grease | Borax |
| Corn Oil | Peanut Oil | Fatty Acids | Stearic Acid | Lanolin | Caustic Potash |
| Cottonseed Oil | Rapeseed Oil | Lard Oil | White Olein | Caustic Soda | Carbonate Potash |
| Olive Oil | Sesame Oil | Neatsfoot Oil | Tallow | Soda Ash | Sal Soda |

Boric Acid
Modified Soda

Silicate Soda
Metasilicate
Tri Sodium Phosphate

Di Sodium Phosphate
Chlorphyll
Superfatting Agent

**Dry Alkali Mixtures**

We compound your formulas. Let us handle this operation for you.

**WELCH, HOLME & CLARK CO., Inc.**
563 GREENWICH STREET — ESTABLISHED 1838 — NEW YORK CITY

vices; when and how to apply insecticides; first aid suggestions in case of insecticidal poisoning; and procurement of insecticides and supplementary materials. Numerous insecticidal materials are discussed from the standpoint of their common uses and important characteristics. Authors of the pamphlet are N. F. Howard, C. A. Weigel, C. M. Smith and L. F. Steiner.

### 115—Convention Folder

Chemical Manufacturing and Distributing Co., Easton, Pa., have gotten out a special issue of their "Target News" for the 22nd annual meeting of the National Sanitary Supply Assn. which was held at the Hotel Morrison, Chicago, Apr. 23-26. The Convention Number is a descriptive circular for some of the soaps and sanitary products made by the company. In addition, a folder on "Target" dishwashing compounds: "Kraft," "Chinalite," "Dish Cleen" and "Economy" that includes a brief description of each of these products also accompanies each copy of the Convention Number of "Target News."

### 116—History of P&G

"Into a Second Century with Procter & Gamble," a 50 page, 8½ x 5½" book containing a history and chronology of the 107 years existence of the company, has just been published. Full color illustrations and black and white photographs trace the history of the company from its founding in Oct., 1837, and record some of the outstanding events in its growth down to the present day.

### 117—List Essential Oil Marks

A supplementary list of 34 trade mark names and coined names of specialties in use by members of the Essential Oil Association of the United States, New York, was issued Apr. 21, and brings the 28-page booklet covering these names and companies using them up to date.

### McCormick Names Waters to Board

Joseph M. Waters was recently appointed to the senior board of directors of McCormick & Co., Baltimore.

### Continental Appoints Three

The following three men have been named as general sales managers for Continental Can Co.'s three newly revised sales territories: Thomas C. Fogarty, formerly district sales manager, will head the new eastern division, with headquarters in New York. Reuben L. Perin, since 1942 general sales manager of the Pacific division, will head the new Central division, with headquarters in Chicago. Frank E. Falk succeeds Mr. Perin as general sales manager of Continental's Pacific division, with headquarters in San Francisco.

### Dispersing Agents

High-molecular hexamethylene tetramine alkylates of any acid ion are used as wetting and dispersing agents. Boehme Fettchemie-G.m.b.H. German Patent No. 735,077.

### Gen. Maintenance Chemicals Moves

General Maintenance Chemicals Co., formerly located at 440 Seaton St., Los Angeles, has moved its offices to 6601 S. Broadway.

ESSENTIAL OILS

THE STIMULATING SCENT OF

**THE PINE FOREST**

SUPREMACY CAPTURED
FOR USE IN

TOILET SOAP and LIQUID SHAMPOO

**PINE FOREST No. 3984-A**

SAMPLE AND PRICE ON REQUEST

**P. R. DREYER INC.**
119 WEST 19th STREET
NEW YORK 11, N. Y.

AROMATICS

### Soybean Output in Sharp Gain

In the twenty years between 1924 and Pearl Harbor soybean production in the United States multiplied nearly 40 times, Dr. Lamar Kishlar, president of the American Oil Chemists Society and food technologist, with Ralston Purina Mills, St. Louis, stated at the recent convention of the National Farm Chemurgic Council in St. Louis. Production in 1924, he said, was five million bushels, while that for 1943 was estimated at 196 million bushels. Astonishing though that record is, domestic production is still insufficient to satisfy industrial demand, he pointed out. "For soybean oil to take the place of all the fats and oils which have been cut off by the war," said Dr. Kishlar, "it would require about 166 million bushels of soybeans each year to do the job. The total domestic crush last year was only 132½ million bushels, or only 80 per cent enough to do the replacement job alone."

—— • ——

### Activated Alumina

Partially dehydrated hydrates of alumina have long been known to be active adsorbents and are now commercially termed activated aluminas. It is only about 10 years ago that the product came into industrial use. The granules are inert, do not break up, and can be repeatedly reactivated by heat without deterioration.

Color, water and other undesirable substances can be removed with activated alumina from waxes, molten or in solution, and from resins such as shellac. Animal and vegetable oils can be purified with it—for example, almost complete removal of objectionable odor from fish oils results from heating the oil with alumina. Alumina also removes acid matter.

Regeneration occurs by heating to 200-250° C. One of the best and simplest methods of determining its quality is to measure its efficiency in absorbing water vapor. The alumina operates at 100 per cent efficiency until 18-20 per cent of its own dry weight of water has been absorbed. After this it operates at reduced efficiency until 30-35 per cent of its dry weight of water has been absorbed, which is the saturation point. American workers have found no appreciable alteration in the product after 1000 reactivations. J. Harwood and W. C. Davies. *Chem. Age* 50, 223-8 (1944).

## WASHINGTON OUTLOOK

(*From Page* 34)

000 lbs., as compared with 1,412,000,000 lbs. for the first quarter. Stocks of lard continue to grow. Purchases of lard for lend-lease have slowed down, and the Government is reported to have ceased buying refined lard. Stocks of lard in cold storage showed a further increase of five million pounds during March and mounted to 69,541,000 lbs. as against 15,425,000 lbs. a year ago. An additional 50,000,000 lbs. of lard were allocated to civilians during March to relieve storage facilities. Lard continues on a ration-free basis and soap manufacturers are reported buying in substantial quantity.

### Soap Sales Criticized

Heavy newspaper advertising of toilet soap sales particularly of private brands by department and chain stores in many cities of the country, particularly in Washington, has brought forth a few frowns in government circles. Soap stocks are still too low for this type of advertising, they say. When a buyer sees toilet soap advertising and attempts to buy chips, flakes and other package soaps on the same multiple package basis, there is disappointment when it is not to be had in the stores. Although soap stocks are ample for normal needs, they are still short and nothing should be done to stimulate heavier buying which might set off another hoarding run, they state. On the other hand, the answer is given, the advertising may tend to create the impression that there is plenty of soap and thus aid in stalling off buying with an intent to hoard.

### Carbon Tet for Cleaners

After eight months during which no carbon tetrachloride has been supplied to dry cleaners, the War Production Board provided a slight measure of relief this past month by setting aside an amount equal to approximately 5 per cent of normal consumption for such use. The allocation to dry cleaners is 214 drums per month, as compared with normal requirements of about 5,350 drums per month. Distribution of the small allotment will be controlled by the Service Trades Division of the Office of Civilian Requirements. It is planned that distribution will be confined to cleaners who are not equipped to make use of other solvents.

Texas Soap Co. has just opened a $30,000 plant in Tyler, Texas, to process salvaged fats.

## OIL DECOLORIZING

(*From Page* 32)

ing. Air and steam are commonly used for this purpose. Again where oxidation of the oil is to be avoided, an inert gas is used for the blowing operation.

Thus it will be seen that the application of active carbon to fats and oils is a relatively simple procedure consisting of mixing and filtering. However, there are many tricks, even in such simple operations, which are learned only by experience and close attention to details.

Determining the optimum active carbon dosage is a task which should first be carried out in the laboratory in small scale tests and the results translated to plant operation. The laboratory tests must therefore parellel as closely as possible the procedures which will be followed in the plant. Factors which must be so controlled are: temperature of treatment, time of contact, speed of agitation, degree of purification desired, and other adsorptive mediums. For example, if fullers earth is to be used in the plant, it should also be used in the laboratory tests. Furthermore, the sample used should definitely be representative of commercial shipments being used in the plant. Experience has demonstrated that higher dosages are necessary in laboratory tests to accomplish results equal to those obtained in plant operation. The relation between plant and laboratory dosages will vary with different oils, as well as with various laboratories and plants. However, it is usually necessary in laboratory tests to use two to three times the plant dosage in order to secure equivalent results.

# SANITARY PRODUCTS

Insecticides • Disinfectants • Moth Products
Floor Products • Polishes • Chemical Specialties

POWCO BRAND
REG. U.S. PAT. OFF.

NH Insect Dust will meet *your* requirements too! NH Insect Dust, a nitrated hydrocarbon derivative, is an excellent contact toxic against crawling insects. NH also kills insect eggs and has long residual action. NH acts quickly and eliminates the hazard of using highly poisonous ingredients.

This new Powco product has been tested for many months by Pest Control Operators and is ideal for service work and for packagers of roach powder. Write for your sample today.

**...ricents** — If you have a perfuming problem, especially for 'difficult to cover' ingredients, investigate these specially compounded insecticide perfumes that will not reduce the toxicity of the spray. Pyriscents are available in many odors, and being completely oil soluble they are 100% efficient and economical.

**JOHN POWELL & CO., INC.**
**118 East 32nd St, New York 16, N. Y.**

## Troublesome Odor Problem?

# BLS may solve it

## as easy as ABC

B L S . . . magic letters to many a manufacturer faced with the problem of modifying, covering or disguising the objectionable odors of technical products.

B L S is short for PERFUME OIL BOUQUET B.L.S. M M & R but it goes a long way towards solving the problems of odor neutralizing at exceptionally low cost.

Let us tell you how B L S can provide the answer to troublesome odor problems as easy as A B C.

**MAGNUS, MABEE & REYNARD, INC.**

QUALITY ESSENTIAL OILS, BALSAMS, AROMATIC CHEMICALS, BASIC PERFUMES, FLAVORING MATERIALS . . . SINCE 1895

16 DESBROSSES STREET, NEW YORK CITY • 221 NORTH LA SALLE STREET, CHICAGO

WEST COAST REPRESENTATIVES—San Francisco: BRAUN, KNECHT, HEIMANN CO. • Los Angeles: BRAUN CORP.
Seattle, Portland, Spokane: VAN WATERS & ROGERS, INC. • Canada: RICHARDSON AGENCIES, LTD., Toronto

# MANNING THEIR BATTLE STATIONS ON THE HOME FRONT

**HI-TOX 20 and Morticide fill the need for efficient insecticide concentrates in these times of great emergency.**

HI-TOX 20 is more than a substitute for Pyrethrum Extract, in its own right, Hi-Tox 20 is an efficient toxic agent for cattle and fly sprays. Its high killing power insures a quick, effective finished insecticide. Durability is another Hi-Tox virtue. Hi-Tox 20 will not separate or throw a sediment even under conditions of extreme heat or cold.

Hi-Tox 20 ages well — does not cloud or alter its composition when exposed to air. Its killing power remains at a high peak regardless of age. Above all, Hi-Tox 20 is economical. 6% of Hi-Tox 20 plus 94% oil base provides an AA spray. It is priced right!

***Use HI-TOX 20 and MORTICIDE for your quality insecticides***

**MORTICIDE does a comparable job on crawling insects, bed-bugs, roaches, etc. It possesses the same lasting qualities and economy features as Hi-Tox 20.**

***WRITE FOR CONTRACT OR SPOT DELIVERY PRICES***

## *Associated Chemists, Inc.*

STOCK Now Available in NEW YORK—Phone or Write Eastern Office

1906 N. HALSTED STREET
CHICAGO 14, ILLINOIS

EASTERN OFFICE: Velsor Wright Company, 8 West 40th St., New York 18, N. Y.
TEXAS OFFICE: The Carroll Company, 1323 Wall Street, Dallas, Texas
PACIFIC COAST OFFICES: Marshall Dill, 2465 Porter St., Los Angeles 21, Cal.
Marshall Dill, 26-28-30 Bluxome St., San Francisco, Cal.

# INSIDE NEWS

MAY PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1944

## Sugar Chemistry To Affect Foods and Drugs of the Future

With the disappearance of sugar's international cartel, producers are asking the scientists to find new industrial uses for this basic food which, for a quarter of a century, has been too abundant to support a profitable price.

The largest American cane and beet refiners, plus the entire Puerto Rican and Hawaiian producing group, are financing a Sugar Research Foundation, with projects in leading technical schools and universities, to analyze sugar's place in man's diet, and develop new uses for sugar in chemical and pharmaceutical industries.

### *Sugar Starvation in Europe*

From the dietary point of view, an abnormal demand for sugar in Nazi-dominated countries can be expected immediately after the war. One of the important results of lack of sugar in the diet is "ketosis", the same condition which, in its severest form, kills the diabetic. Ketones are the chemicals made by the liver from sugar and fat, and which normally circulate in the body and are converted into energy. Without sugar for the liver to work on, the liver utilizes the body's reserve fats and produces so many unusable ketones that the body is poisoned by them. Ketosis results: a wasting away of the muscles, lethargy, coma and eventual death.

In this connection, researchers are analyzing the relation between sugar and thiamine, a Vitamin B. Thiamine is essential to the proper assimilation of sugar. Research is directed at such questions as, for instance, whether sugar should be fortified with thiamine; how different diets affect the body's production of thiamine; and the specific effects of various sugar diets on disease resistance, tooth decay, and longevity.

### *Paint, Vitamins, Penicillin*

Researchers are giving particular attention to the possibility of utilizing the carbon, hydrogen and oxygen in sugar's complex molecule (C-12, H-22, O-11 in sucrose, for instance) as "building blocks" for the synthesis of a wide variety of useful chemicals, just as science now converts coal-tar and petroleum. Already, sugar is a well-known basis for alcohol, which is itself a "sugar", as well as various solvents for lacquers and finishes. It may also prove useful in the manufacture of alkyd resins for paint and plastics, if certain chemical changes can be accomplished.

Sugar fermentation is also the present basis for many pharmaceuticals, including the widely-used citric acid; penicillin, too, is made by a special mold acting chemically on sugar syrup or molasses.

One of the principal difficulties in obtaining such products as ascorbic acid from sugar, or biotin from molasses, is the delicacy of the sugar molecule. It can be acted on only by mild substances which will not "burn it up." Such fermentation processes which might be termed "controlled oxidation" have recently proved successful in the laboratory. Much of sugar's usefulness as a raw material will depend on whether or not these ticklish processes can be carried out in large-scale commercial production.

### *Return To Progressive Policies*

Thus, the disappearance of the type of surplus and export controls formerly exercised by the International Sugar Committee, while presenting the sugar industry's perennial problem in its acutest form, may prove beneficial in the long run. Few will question the advantages of solving a cost-price problem of this kind by creating new wealth through science, rather than by pursuing a course of static restriction. 631

## "DDT" for Civilians

Civilians soon stand to benefit immensely from a warborn product — the insecticide material identified as "DDT". Chemically, DDT is said to represent Dichlorodiphenyltricloroethane. Production in the United States is even now being expanded rapidly, and small civilian supplies are expected to be available during the latter half of the year. Currently, the armed forces are consuming the entire output.

One of the principal practical advantages of DDT is reported to be the absence of obnoxious odor. Neither does it affect the mucous membranes of the eyes, ears, and throat during use. It has been proven effective in destroying flies, agricultural insects, and body lice, while being harmless to human beings and warm-blooded animals. First large scale use of DDT is reported to have been the delousing of large groups of refugees arriving in Switzerland, in which country the material was originally produced in commercial quantities.

A bright future is predicted for the material in the agricultural insecticide field, since it has been found effective against the coddling moth, a destructive apple pest. DDT is reported to be better for this use than lead arsenate, which heretofore was the standard control agent. 632

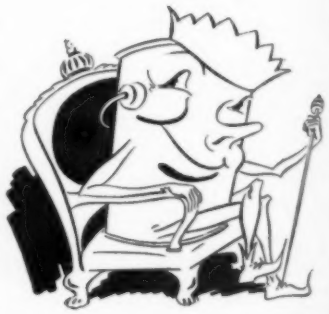
## Olive Bacteria

Experience of the olive industry that seven to eight percent of salt in brines of fermenting olives is required to prevent spoilage has been confirmed by recent research. Strains of butyric acid producing anaerobes were isolated from Spanish type green olives which were undergoing abnormal fermentation and spoilage. Experimental cultures were grown to determine the conditions required to prevent growth of these undesirable bacteria. Salt up to five percent was tolerated by a number of strains and six percent by one. 633

## Citrus Information

Specially prepared for canners and packers of citrus fruits and citrus products interested in facilitating fruit washing and expediting daily clean-up of processing and handling equipment, a new illustrated booklet describes successfully used sanitation and germicidal methods, de-scaling techniques and related practices. The booklet stresses extra vigilance and attention toward maintaining purity of product, safeguarding against bacterial contamination, reducing spoilage loss and retaining flavor, taste and color. It gives in detail sanitation and maintenance procedures connected with the preparation, processing or production of citrus fruits, juices, preserves, marmalades, syrups and similar products such as: Elimination of insoluble residues from soaking tanks, rollers, brushes, etc. Cleaning of sanitary fittings, pumps, pipings, cooking kettles, vats and tanks. Removing citrus pectin from spiral cooking coils . . . fruit residues, burnt-on deposits, juices, lime-scale and similar accumulations from pasteurizers and preheaters. De-scaling ammonia condensers and water-cooled compressors, steam-jacketed kettles, mechanical washing machines, etc. Steam-detergent cleaning of packing house equipment and processing machinery. 634

**KING CAN**



TRIED AND TRUSTED in all the tests of war...all the tests of peace..."King Can", genial monarch of tin, will return to the Kingdom of Packaging when the war is won.

In the meantime, war-time research, stimulated by the Tin Conservation Program, has developed new ways for "King Can" to serve you even more economically, more efficiently, when he is back again.

# NATIONAL CAN

PLANTS: NEW YORK · BOSTON · BALTIMORE · CHICAGO · HAMILTON, OHIO · FORT WAYNE, INDIANA


## "Freezing" Reports

A number of canned fruits and vegetables are not affected so far as ultimate use by the consumer is concerned if they happen to be frozen between the time they are packed and the time the consumer receives them. Some varieties, on the other hand, are affected in varying degrees. The full story on tests on 35 different canned products is available and was published recently, the result of research done at the National Canners' Association Washington Research Laboratory. If you want the whole story of how freezing may affect your product, we'll tell you where to find the full report. 635

## Sardine Bacteria

Until recently there has been no detailed bacteriological survey of sardine canning comparable to the surveys that have been made for other types of canned products. Such a survey now has been made and the results are available. They show that only a small number of bacteria are normally present in and on the fish and that heat-resistant types were absent. Organisms capable of growing under anaerobic conditions occurred irregularly and were not numerous in any instance. Bacteria pickup resulting from primary salting seem to be insignificant but steaming and drying operations reduced this number to a very low level. A substantial percentage increase in the bacterial load was found during the trimming and filling operations. Conditions under which this increase vary are given. If you want full information on the survey and the recommendations included, we'll tell you where to find it. 636

## Agar Research

Commercial agar, a product used in the food industries as a stabilizer and as a culture for bacteria in quality control work, has become so scarce that two laboratories of the Fish and Wildlife Service and at least a dozen state and private institutions are attempting to develop new sources of supply. Before the war 92% of the agar used in the United States was imported from China and Japan. When this supply was cut off, WPB acted to conserve existing supplies for their most essential use — as a culture medium in bacteriological laboratories. Other prewar uses included the manufacture of confections, emulsifiers, dental impression materials and laxatives. 637

## Lettuce Preservative

Discoloration and deterioration of lettuce heads during shipment or storage can be inhibited by treatment with an antioxidant. 638

## Edible Antifreeze

Quick frozen foods can be marked or identified in the frozen state with an edible antifreeze agent which loses its identity when the temperature rises above a certain predetermined point. 639

# Technical Topics

LOW VISCOSITIES — Aluminum soap solutions of low viscosities, although comparatively concentrated, may be attained by the addition of polar organic solvents, it is stated in a recent British patent. The solutions are declared to be particularly useful in waterproofing practice. Hydrocarbon solvents such as toluol, benzol, and petroleum naphtha, combined with an ammonia derivative, may be used as the polar solvent. 640

"SAUSAGED" EGGS — Eggs, packed in a rubber casing like sausages, is a new invention for safe shipping. The sealing machine patent has been assigned. 641

METALLIC ENAMELS — Enamelled finishes similar in appearance to gold, brass, copper, and bronze are reported possible through the use of a new formulation incorporating vermiculite. In the process described, the vermiculite is sintered, then pulverized and sieved, and the powdered material applied to the surface being enamelled before the final firing operation. 642

PRESERVATIVE — A new preservative for drugs, cosmetics, and pharmaceuticals is available. The product easily soluble in water and odorless is now used to preserve lotions, emulsions, gum solutions and other products easily subject to destruction by mold and fermentation. 643

"SHEET" CITRUS — Reports come from Middle East that experiments are being made to produce dehydrated sheets of orange and lemon for export. 644

PYRETHRUM REPLACEMENT — A new type roach powder to replace pyrethrum products, now unavailable because of war demand by the Armed Forces for mosquito control, has recently been put on the market. The active ingredient is one of the thiocyanates, and this killing agent is dispersed on an inert extender such as talc or pyropphyllite. 645

DIVERSIFIED USES — A new product which is said to possess excellent qualities as a flavoring vehicle, as a plasticizer and chemical intermediate for food processing, and in cosmetic and pharmaceutical manufacture, has just been placed on the market. 646

WEEVIL PROTECTION — Extensive tests from Australia show that magnesite powder is effective for 12 months in protecting stored grain from the two commonest weevils. Dolomite and diatomaceous earth also showed promise. 647

PERILLA — Formerly imported from Asia, perilla has been successfully cultivated in the midwest. It yields an oil, used for its quick drying qualities, in paint, linoleum, etc. 648

AFRICAN FROGS — By use of hormones, African frogs, the species used in pregnancy tests, can now be bred in the United States, overcoming a shortage in this country caused by war. 649

SULPHUR — A leading American company is operating a new plant which extracts six tons of 99% pure sulphur daily in the purification of a daily rate of 54 million cubic feet of coke oven gas. 650

TOMATO OIL — Oil from tomato seeds, used in Italy for soap, represents a huge potential in American canneries where most of the seed and pulp is not processed or used. 651

DICYCLOPENTADIENE — Production from the front runnings obtained in the distillation of benzol is described in a recent British patent. Difficulties heretofore involved in the distillation of the "fronts" so as to isolate the dicyclopentadiene may be overcome, it is claimed, by distilling the mixture with an excess of water. The dicyclopentadiene passes over with the water at ordinary pressures. Crystallization then occurs when the aqueous distillate drops to normal room temperature. 652

"B" IN BEER — Riboflavin and nicotinic acids, two components of the vitamin B complex, are found in appreciable amounts in beer, recent British investigations have shown. There is reasonable assumption that it contains appreciable amounts of lecotin pantothenic acid and inositol. It is pointed out that brewing research in the future may possibly modify malting and mashing conditions so as to further improve the vitamin content. 653

---

*Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquiries to the original source of the article. Write to National Can Corporation, 110 East 42nd Street, New York City. Please mention the number at end of article— also name of the magazine you saw it in.*


**NATIONAL CAN CORPORATION**

*Manufacturers of*

**SANITARY PACKERS CANS · PLAIN AND LITHOGRAPHED CANS FOR FOODS, DRUGS, OILS, PAINTS, VARNISHES · STEEL DRUMS AND PAILS**

**Deliveries Subject to Priority Ratings**

(*Advertisement*)

## *YOU Can Help Protect the Dairy Industries Against this Fly-Scurge*

Each spring over 20,000 dairy products plants all over America begin their long and hard fight against flies.

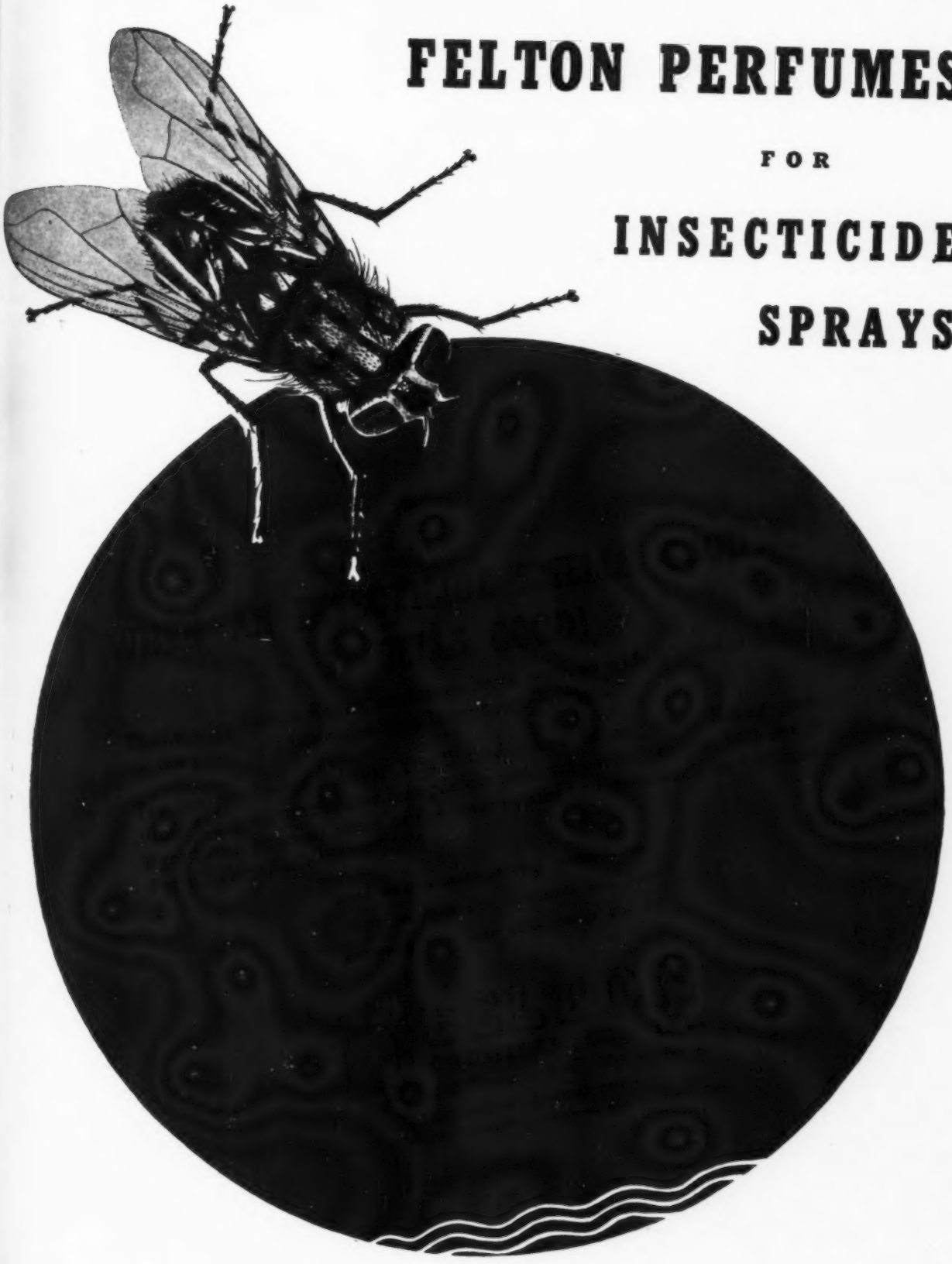
The super-sanitation required in these plants makes sure-kill methods urgently necessary.

Dairy products manufacturers need YOUR fly spray and insecticides to win this daily battle against insect pests.

You can reach and sell this broad national "must-have" market through the Dairy Industries Unit . . . a combination of the three most important trade publications completely covering all divisions of dairy products manufacturing. Write for Details.

**THE OLSEN PUBLISHING COMPANY**
505 W. CHERRY STREET — MILWAUKEE 12, WISCONSIN

The ICE CREAM REVIEW ABC | the MILK DEALER ABC | National BUTTER and Cheese Journal ABC



# FELTON PERFUMES

FOR

# INSECTICIDE SPRAYS

# Zip-On Floor Treatments

## ZIP-ON Rubless FLOOR WAX

AN especially high-grade emulsion wax for the trade . . . designed for easy and fast application . . . giving high gloss . . . unusually water resistant . . . maximum non-skid properties . . . will not jell or become pasty in storage . . . gives a durable and attractive finish . . . can be sold to industrial and institutional customers with full confidence . . . write us for sample and prices . . .

* * *

Our full line of floor-treatments also includes paste and liquid solvent waxes, floor sealers, gym finishes, etc., as well as metal and furniture polishes . . . we specialize in bulk and private brand products for the trade.

* * *

**SHAWMUT SPECIALTY CO.**

313 CENTRE STREET BOSTON 30, MASS.

Zip-On Floor Treatments

HOW CAN WE MAKE OUR PRODUCTS MOST ATTRACTIVE TO THE CONSUMER, MR. SULIBURK ?
BY UTILIZING THE DISPLAY ADVANTAGES OF THE GLASS PACKAGE

Trim, modern, lustrously clean, the glass container increases the eye appeal of your products. Glass is highly sanitary, is impervious to most products, and, by showing the consumer what he is getting, inspires confidence and promotes acceptance of your brands. Standard stock glass containers of sparkling amber or crystal glass should be combined with labels of attractive design. And select the closure with care; not only its appearance, but its ease of removal and resealing influence consumer preference. For glass packages at their gleaming best, use Anchor Hocking containers and closures—practical, sturdily protective, convenient, and precision-made to "spotlight" your brands in the competition for attention on dealers' shelves.

*"Meet Corliss Archer" every Saturday afternoon, entire coast-to-coast network CBS*

**W. M. SULIBURK,** one of Anchor Hocking's ablest and most popular men, has been a member of the Anchor Hocking family for 15 years.

ANCHOR HOCKING

GLASS & CAPS

ANCHOR HOCKING GLASS CORPORATION · LANCASTER, OHIO

# PRENTISS RED SQUILL for RATS

**FORTIFIED—ACTIVATED—STANDARDIZED**

**Prentiss Fortified Red Squill Powder is sure-death for these disease-carrying rodents but relatively non-poisonous to humans and domestic animals. Prentiss is now producing fortified Red Squill consistently high in toxicity with an established standard of 500-600 mg/kg. If you have a rat control problem or are interested in packaging a raticide write, wire or phone us for detailed information and prices.**

**R. J. PRENTISS & CO.**

80 JOHN STREET, NEW YORK 7, N. Y. 9 SO. CLINTON ST., CHICAGO 6, ILL.

"I OBJECT, YOUR HONOR!"
What are the usual objections to an insecticide?
1. The odor of the killing agent seeps through.
2. The disguising perfume lingers too long.
Strike both of them from the record when our expert perfume-chemists do the job for you. They have had the experience to work out this not-too-easy problem.
Just send us a gallon of your spray unperfumed. We will perfume it in one, or several odors — for your approval.
VAN AMERINGEN-HAEBLER INC.
315 FOURTH AVENUE • NEW YORK 10, N. Y.

# . . . *Official Test Insecticide (O.T.I.)*

SUPPLIES of the 1943 Official Test Insecticide for evaluating fly sprays by the Official Peet-Grady Method are available only from the office of this Association. The O.T.I. is priced at $5.00 per dozen six-ounce bottles, plus shipping costs, to members of this Association. To others, there is an additional service charge of $1.00 per dozen. Single bottles are $1.00 each. Check with order is required.

The 1943 Official Test Insecticide is required for all official testing of fly sprays by the Peet-Grady Method for the period from June 1, 1943 through May 31, 1944.

## *National Association of Insecticide & Disinfectant Manufacturers, Inc.*

110 East 42nd Street — New York

**OFFICERS**

*President* . . . . . H. A. NELSON, Chemical Supply Co., Cleveland
*First Vice-President* . N. J. GOTHARD, Sinclair Refining Co., East Chicago, Ind.
*Second Vice-President* . . . . . GORDON M. BAIRD, Baird & McGuire, Inc., Holbrook, Mass.
*Treasurer* . . . . . JOHN POWELL, John Powell & Co., New York
*Secretary* . . . . . H. W. HAMILTON, Koppers Co., White Tar Division, Kearny, N. J.

**BOARD OF GOVERNORS**

J. L. BRENN . . Huntington Laboratories, Huntington, Ind.
JOHN CURLETT . . . . . McCormick & Co., Baltimore
MELVIN FULD . . . . . Fuld Bros., Baltimore
CHARLES W. FURST . . . . . Furst-McNess Co., Freeport, Ill.
JOHN MARCUSE . . . . . West Disinfecting Co., L. I. City
A. W. MORRISON . . . . . Socony-Vacuum Co., New York
FRIAR THOMPSON . . . . Hercules Powder Co., Wilmington
C. L. WEIRICH . . . . . C. B. Dolge Co., Westport, Conn.
W. J. ZICK . . . . . Stanco, Inc., New York

# Get Greater
# *REPELLENCY AND AA KILL*
# Use VELSICOL

**AR-50**
**FOR HOUSEHOLD SPRAYS**

**AR-60**
**FOR CATTLE SPRAYS**

Completely effective sprays must have high repellency as well as AA Kill. Velsicol AR-50 and AR-60 assure your sprays superior power and performance in the control of harmful insects.

Vital statistics from Peet-Grady tests indicate the outstanding excellence of Velsicol sprays. Actual fly count on University experimental farms has proved that Velsicol AR-60 blends kill more flies and have greater and longer lasting repellency than competing sprays. Velsicol sprays remain stable in all types of containers for extended periods of time.

## *STRETCH* Your Supply of Rotenone

**FOR AGRICULTURAL DUSTS AND SPRAYS**

Velsicol AR-60-Rotenone combinations will improve your agricultural dusts and sprays. Because of its remarkable solvent power for derris root and cubé, Velsicol AR-60 makes your available Rotenone supply go three to four times as far as less active solvents. The high solvency of AR-60 leaches out the vital Rotenone particles, spreads them over a greater surface, and thus increases their effectiveness. In addition, AR-60 contributes its own very substantial toxic action against a wide variety of injurious insects. AR-60 also is compatible with other toxicants commonly used in agricultural dusts and sprays.

Write now for samples and complete information!

**VELSICOL**
*Corporation*

GENERAL OFFICES: 120 EAST PEARSON STREET, CHICAGO

VELSICOL

PLANT: MARSHALL, ILLINOIS

YOUR **8.5** BILLION DOLLAR Mass Feeding Mass Housing MARKET

Each month INSTITUTIONS Magazine reaches:

- HOTELS
- HOSPITALS
- SCHOOLS
- RESTAURANTS
- INDUSTRIAL CAFETERIAS
- COLLEGES
- PUBLIC INSTITUTIONS
- YMCA's and YWCA's
- RAILWAY SYSTEMS
- STEAMSHIP LINES
- PUBLIC BUILDINGS
- OTHER INSTITUTIONS

and . . . for the duration of the war—in addition to its regular circulation, INSTITUTIONS Magazine is being sent to buyers and specifiers of mass housing and mass feeding products for those directly engaged in the war effort.

# *A* BIG *Market of* BIG *Consumers*

THE readers of INSTITUTIONS Magazine represent a post-war market of huge proportions . . . an 8.5 billion dollar post-war market that is yours today! The readers of INSTITUTIONS Magazine are the big consumer buyers of all types of mass housing and mass feeding products . . . the buyers by whom this 8.5 billion dollars will be spent. The readers of INSTITUTIONS Magazine will expend a large percentage of this figure for maintenance supplies of all kinds.

These are the men and women who depend upon INSTITUTIONS Magazine for authoritative assistance on their immediate and post-war problems . . . for the type of product information they must have in directing their planning and buying on a practical and sound basis.

Manufacturers of soaps, disinfectants, insecticides, floor treatment materials, cleaning compounds and other similar products who are now advertising to this huge market through INSTITUTIONS Magazine are using the most effective and most economical means of approaching these big consumer buyers. These manufacturers are not only enjoying the immediate benefits of this market . . . they are also building for themselves a preferred position among institutional managements in the post-war period.

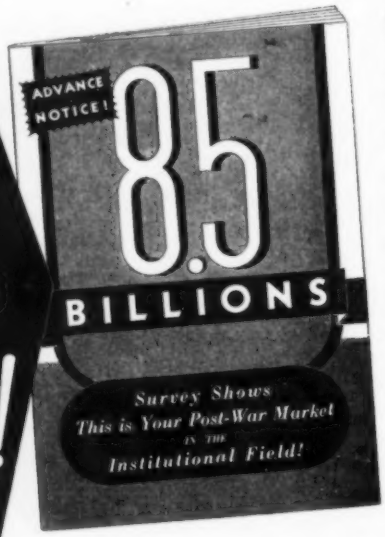
INSTITUTIONS Magazine is the only publication through which you can reach all related divisions of the institutional field. If your present or contemplated products have an application to this field, your advertising messages in the columns of INSTITUTIONS Magazine will gain for them the kind of acceptance they must have to share in the 8.5 billion dollar institutional market.

YOUR **POST-WAR MARKET** IS HERE TODAY!

. . . NEW STUDY GIVES

**FACTS AND FIGURES!**

*Consult Your Advertising Agency*




To determine the size and extent of the post-war market in the institutional field, INSTITUTIONS Magazine conducted a survey among over 50,000 hotels, hospitals, schools, colleges, restaurants and other types of institutions. The findings of this survey—which have been presented in this booklet—are of special interest to all manufacturers now serving or planning to serve this field. To obtain details on this survey, or for information on the application of your products to the mass feeding and mass housing market, consult your advertising agency or write direct.

INSTITUTIONS MAGAZINE
1900 PRAIRIE AVENUE
CHICAGO 16, ILL.

# Let's take a look at...
# PYRETHRUM
## *1944—and After*

THERE is no faint possibility that the present year will see the household insecticide industry re-introduced to pyrethrum. Available supplies are urgently needed for mosquito control in combat areas, and one need not have access to the files of the General Staff to predict increasing military activity in some of the worst malarial regions of the world.

It is even more certain, however, that the plantings now being encouraged to meet military requirements will go on flowering profusely after the guns are silent. The long-range view promises adequate and even ample supplies at reasonable costs.

Fortunately, substitutes have been available to carry through what might easily have been a disastrous period for the industry and its customers, but none yet has challenged pyrethrum's two great advantages—toxicity to a wide variety of insects, and safety to men and animals.

ESTABLISHED 1798

## DODGE & OLCOTT COMPANY

180 VARICK STREET, NEW YORK 14, N. Y.

Boston Chicago Philadelphia St. Louis Los Angeles

Plant and Laboratories, Bayonne, N. J.

# QUALITY SPECIALTIES

*made better with*

# SONNEBORN

## Petroleum Products

Leading manufacturers of many chemical specialties have long standardized on SONNEBORN white oils, petrolatums and other petroleum products . . . convincing evidence of the unsurpassed Quality, Purity and Stability of these highly refined ingredients.

End-uses of some of the successful chemical specialties which are made better with SONNEBORN petroleum products are shown. There are many others.

The research facilities of the SONNEBORN laboratories, backed by 64 years of refining experience, are available for aid in current production problems and in the development of new products for postwar markets.

Write for
TECHNICAL DATA FILES
on uses that interest you.

*SONNEBORN PRODUCTS FOR CHEMICAL SPECIALTIES*

**DEO-BASE**
For Household, Cattle and Agricultural Sprays, Degreasing, Cleaning and Polishing Emulsions.

**PETROMIX No. 9**
For Degreasing, Cleaning and Polishing Emulsions.

**TRI-OL**
For Brushless Shave Creams, Soapless Oil Shampoos, and Skin Cleansers.

**SULPHONATED OILS**
For Animal Remedies and Protective Creams for Industry.

**PETROBLEND**
For Agricultural Sprays.

**PETROLATUMS U. S. P.**
For Insect Repellent Creams, Animal Remedies, Protective Creams for Industry.

**WHITE MINERAL OILS**
For Insect Repellent Lotions and Animal Remedies.

CARNATION for Protective Creams for Industry, Soaps and Brushless Shave Creams.

KLEAROL for Cattle Sprays and Emulsion Polishes.

PURITAN for Corn Earworm Oils.

SPRAY STOCK "A" for Agricultural Sprays.

*WHITE OIL DIVISION*

# L. SONNEBORN SONS, INC.

88 Lexington Avenue, New York 16, N. Y. • Refineries: Petrolia and Franklin, Pa.

Southwestern Distributors: Sonneborn Bros., Dallas, Texas

Branch Offices: Chicago, Baltimore, Philadelphia and Los Angeles

Stocks Carried in Principal Cities

# RED SQUILL

## *Fortified Dethdiet Brand*

"Nature's Destructive Agent for Rats"

*Write for free booklet—RED SQUILLS*

IT has long been recognized that the problem of reducing the rat population of the country would be accomplished more efficiently by the use of Red Squill, potent enough to kill most of these disease-carrying, property-destroying rodents.

Supplies of Red Squill have been scarce during the war period, but now replenishing stocks are arriving from liberated areas. This material, however, is of low toxicity, and government agencies concerned with the rat control problem will not permit its distribution as received . . . The Fish and Wildlife Service of the Department of the Interior, which has interested itself in this commodity for many years, has established a standard of 500-600 mg/kg.

From material allocated to us, we now manufacture, by a newly developed concentration and fortifying process, Red Squill of the required potency. It is approximately *four times more toxic to rats than the Red Squill generally distributed in recent years.* Here is an opportunity to add an effective product to your line.

***BETTER RED SQUILL MEANS BETTER RAT CONTROL***

# S. B. PENICK & COMPANY

**50 Church Street, New York 7, N. Y.**
**Telephone: COrtlandt 7-1970**

**735 W. Division Street, Chicago 10, Ill.**
**Telephone: MOHawk 5651**

**THE WORLD'S LARGEST BOTANICAL DRUG HOUSE**

***Buy War Bonds and Stamps . . . For Victory***

# *Just Out*

## *The New* 1944 BLUE BOOK

a copy of the BLUE BOOK has just been mailed to every subscriber to SOAP AND SANITARY CHEMICALS. We are sorry that, because of the paper shortage, there can be no distribution of the BLUE BOOK this year to other than subscribers, nor will it be possible to supply subscribers with additional copies.

*Published by*

**MACNAIR-DORLAND CO.**

**254 West 31st Street** **New York, N. Y.**

## You have to look "hard" to see *that the bottles are similar*

There is magic in labels. Magic you need while government restricts bottle shapes and sizes. Magic that will enable you to continue to benefit from the economies of standard bottles in meeting the hard competition of post-war days. Duraglas Customer Service works with users of Duraglas jars and bottles and designers of labels, to produce the effect you instantly feel when you glance at well-stocked shelves:—

*"What a lot of different products!"*

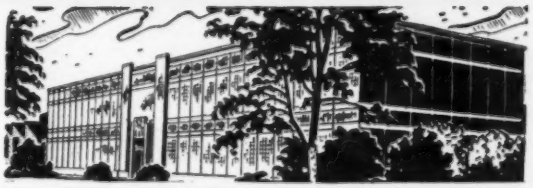
*"How that brand over there stands out!"*

Close inspection proves that shape and size of many of the bottles are similar. The magic of individuality is in labeling. Remember the value and the savings of artistically dressed standard bottles and containers when you plan your post-war operations.

* * *

**TUNE IN**—"BROADWAY MATINEE," Mondays through Fridays, CBS, 4 P.M., Eastern War Time, with ALFRED DRAKE, star of the Theatre Guild's musical hit, "Oklahoma!"

***OWENS-ILLINOIS GLASS COMPANY***
***TOLEDO, OHIO***



**1. America's most completely equipped container research laboratories—located at Toledo, Ohio and San Francisco, California.**

**2. The "know how" resulting from more products going to market in Duraglas containers than in any other brand of glass.**

**3. Twenty strategically located plants with the most modern production facilities.**

**4. Duraglas Customer Service from the production line to the consumer's mind. Quality Control . . . Packaging Research . . . Merchandising and Sales Promotion . . . National Advertising in leading magazines reaching millions of men and women . . . "Broadway Matinee," complete Columbia Coast-to-Coast Network—Five times a week—**

Duraglas
CUSTOMER SERVICE

***All designed to help you sell your products in Duraglas Containers***

## AND THEIR COSMETIC NEEDS CHANGE, TOO

WHEN, following World War I, cosmetics grew into a billion dollar business, Nopco—through research and sound manufacturing methods—was in a strong position to help cosmetic manufacturers to improve and modernize their products.

Today, Nopco and the cosmetic industry are of course subject to wartime restrictions. Yet both have much to look forward to.

The coming *postwar era*, for example, will find Nopco ready to help you meet the peacetime demand for better beauty aids.

Right now, Nopco is conducting research in anticipation of the day when it can again help you with your ingredient problems.

**COSMETIC BASES • SHAMPOOS • ABSORPTION BASES**

**NATIONAL OIL PRODUCTS COMPANY • HARRISON, N. J.**

BOSTON • CHICAGO • CEDARTOWN, GA. • RICHMOND, CALIF.

# CITRONELLA OIL ARTIFICIAL

# SPANISH ROSEMARY

# SPANISH SPIKE LAVENDER

# ARTIFICIAL SASSAFRASS

For many years much of the research and development work of our laboratory has been devoted to the perfumery problems of the soap and sanitary chemicals industry. As a result we have been able to supply synthetic products successfully to relieve shortages caused by war conditions. Why not consult us regarding your problems? Samples upon request.

**ESSENTIAL OILS and SYNTHETICS**

BERGAMOT
CASSIA
CEDARWOOD
CEDARLEAF
CLOVES
GERANIUM
LAVENDER
THYME
WINTERGREEN
PETITGRAIN

BENZYL ACETATE
TERPINEOL
AMYL SALICYLATE
ANETHOLE
CINNAMIC ALDEHYDE
CITRONELLOL
EUGENOL
ISOEUGENOL
HELIOTROPINE
ISOBORNYL ACETATE
LINALYL ACETATE
IONONES
MUSKS
TERPINYL ACETATE

**PERFUME BASES**

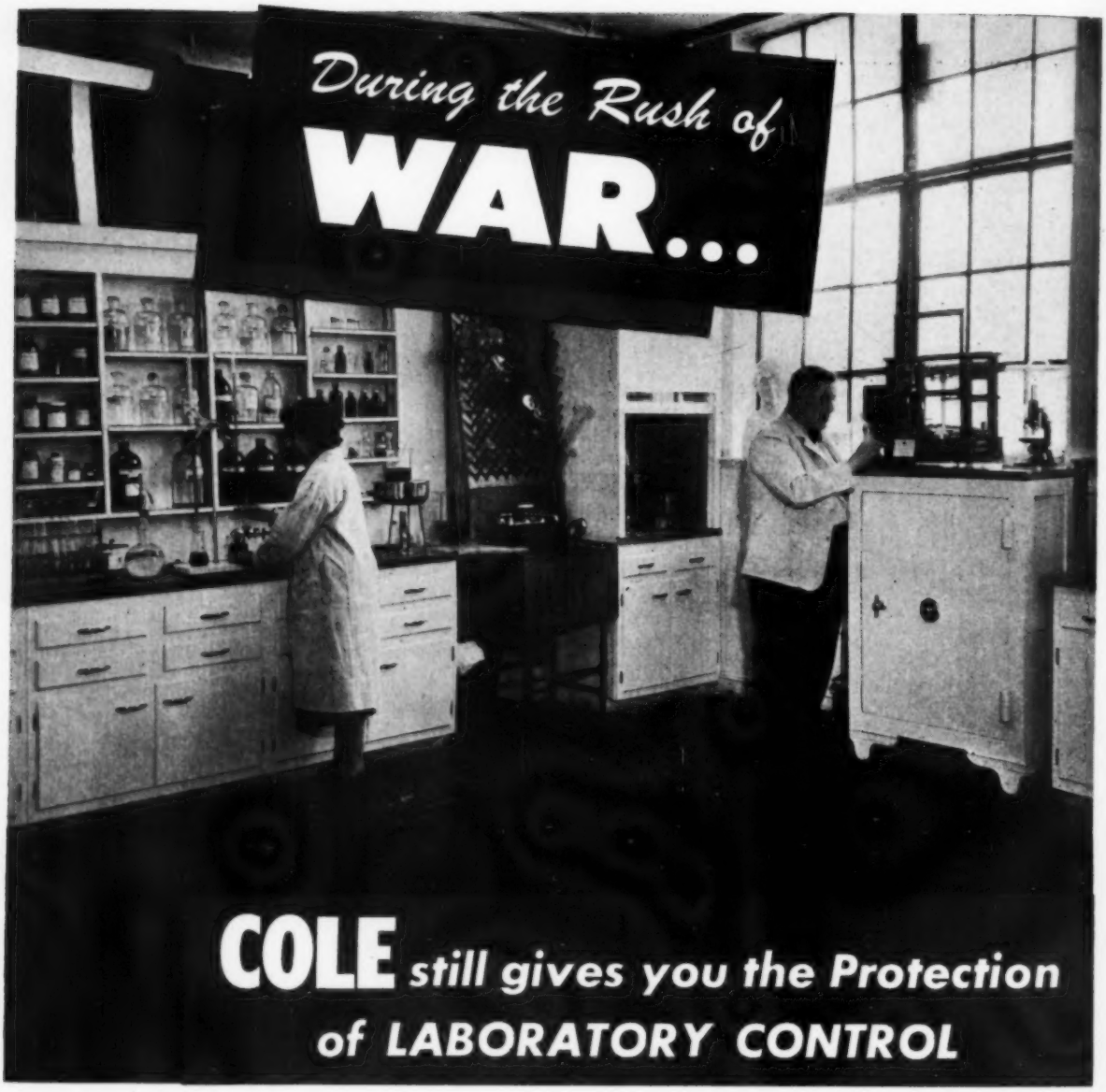
ROSE
LILAC
JASMIN
LAVENDER
CARNATION
SWEET PEA

## STANDARD SYNTHETICS, INC.

30 WEST 26th STREET NEW YORK 10, N. Y.

*BRANCHES AT*

CHICAGO SAN FRANCISCO KANSAS CITY, MO.




**FIRE EXTINGUISHER RECHARGES**

Soda and Acid Types
Foam Type
Foam Liquid Solutions
Pump Type (liquid)
Non-Freeze Charges

Although our three plants are all busily engaged in filling war orders which must take precedence over civilian requirements — we want our customer-friends to know that we are still in a position to satisfy their civilian needs and supply them with COLE Products in limited quantities.

Despite these action-packed days, you can rest assured that COLE Products continue to represent the utmost in quality — because step by step, COLE Products are protected by continuous LABORATORY-CONTROL.

Disinfectants
Insecticides
Soaps — Waxes
Polishes
Cleaners
Deodorants
Fire Extinguisher Recharges

**For prices and literature, write Dept. S.C.**

**COLE LABORATORIES**
**23d St. and 37th Ave. • Long Island City, N. Y.**

LIQUID
SOLID
FLAKE
GROUND

# Specify SOLVAY CAUSTIC POTASH

TRADE MARK REG. U. S. PAT. OFF.

## YOUR *ONE* SOURCE OF HIGHEST PURITY POTASH WITH *EXTRA* QUALITY ADVANTAGES

TANK CARS
DRUM LIQUOR
SOLID
FLAKE
GROUND
*in convenient size containers*

In these days of shortages SOLVAY is *the* one central source manufacturers of Potash Soaps and Potash Chemicals can depend upon for Caustic Potash and Potassium Carbonate.

Whether it's Caustic Potash in liquid, solid, flake, and ground form, or calcined and hydrated Potassium Carbonate—they get *purity* of the highest standards plus EXTRA quality advantages!

Make SOLVAY your *one* central source of dependable quality potash. Convenient size containers, prompt deliveries assured.

**SOLVAY SALES CORPORATION**
*Alkalies and Chemical Products Manufactured by The Solvay Process Company*
40 RECTOR STREET NEW YORK 6, N. Y.

BRANCH SALES OFFICES:
Boston Chicago Cleveland New Orleans Philadelphia St. Louis
Charlotte Cincinnati Detroit New York Pittsburgh Syracuse

# SANITARY PRODUCTS

## their manufacture, testing and use

### By Leonard B. Schwarcz

CONTENTS

**Sanitary Products Industry** — reviewing the type firms in the industry, the products they manufacture, and their annual value.

**Discovery of Bacteria**—historical background on the germ theory of infection.

**Principles of Disinfection** — the role of chemical preparations in disinfection; definition of disinfectant terms.

**Coal Tar Disinfectants**—a review of their manufacture and use.

**Cresol Compounds** — Liquor Cresolis Compositus, B.A.I. Compound, petroleum-type cresylics.

**Pine Oil Disinfectants**—manufacture, properties and uses.

**Hypochlorites**—manufacture, properties and uses of chlorine disinfectants.

**Formaldehyde**—its applications in the disinfectant field.

**Oil Soaps**—manufacture, sale and use of jelly soaps, green soaps, auto soaps, floor scrubbing soaps, etc. Special attention is given to manufacture of oil soaps from fatty acids.

**Liquid Soaps**—The case for liquid soaps for washroom use. A review of raw materials, manufacturing methods, use, etc., with special attention to the problems of clarity, concentration, dispensing equipment, etc.

**Soap Dispensers**—a review of the common types of liquid and powder soap dispensers, push-in, push-up, tilt, goose-neck, pullman, etc.

**Floor Waxes**—A review of raw materials for floor wax manufacture and a study of manufacture and application of liquid waxes, paste waxes, water-emulsion waxes.

**The Insect Problem**—A review of the general role which insecticides must fill in man's battle against the insect world.

**Pyrethrum Insecticides**—The important place that pyrethrum has taken in the manufacture of non-poisonous insecticides. Manufacture, testing and use of pyrethrum insecticides are reviewed.

**Rotenone Materials** — Occurrence and toxicity of rotenone, and its use as an insecticidal raw material. Comparisons with pyrethrum on toxicity and deterioration.

**Synthetic Insecticides**—The most complete review yet published of the chemical nature, characteristics, and use in insecticides of a dozen synthetic materials.

**Activators**—The action of activators in stepping up insecticide toxicity. A study of activators which are in current use.

**Roach Control** — Roach powder formulation. The role of sodium fluoride and borax.

**Bedbug Liquids**—Control methods and special preparations.

**Livestock Sprays**—Manufacture and use of cattle sprays, with particular emphasis on repellency, application and choice of oil base.

**Sprayers**—A review of hand, continuous and electric types. Applicators for aerosols are also discussed.

**Moth Preparations** — Use of paradichlorbenzene, naphthalene, cedar preparations, etc., in moth control. Cautions on labeling.

**Deodorant and Urinal Blocks**—Para vs. naphthalene blocks. Pressed vs. molded blocks. Perfuming, wrapping, etc.

**Labeling and Packaging**—The most complete review ever published of the obligations of the sanitary products manufacturer under the Insecticide Act of 1910, The Caustic Poisons Act, The Federal Trade Act, the Food, Drug and Cosmetic Act and the various state laws. Typical decisions of the AMA and the FDA in reviewing offending labels are presented, along with sample labels of approved content.

**Appendix**—Complete text of Insecticide Act of 1910, Caustic Poisons Act, Peet-Grady Test for Insecticides, FDA Method for Disinfectant Testing, Mercury Reduction Method, Seil Method, NAIDM Specifications, list of approved antidotes.

SANITARY PRODUCTS has standard high-grade book binding, cloth and board covers, 6 x 9, 312 pages. Priced at $5.00 per copy. Check *must accompany* order. Orders for books to be sent on approval *cannot be accepted*, but the usual return privilege will be accorded where copies are returned unmarred within 10 days. Owing to present conditions, the first edition must be limited. Accordingly an *early order* accompanied by check is suggested.

*Published by*

## MACNAIR-DORLAND CO.

254 West 31st Street — New York 1, N. Y.

# SHELL REGULAR BASE

**Refined to meet the needs of modern household insecticide manufacturers**

SHELL

**SHELL OIL COMPANY, INC.**

**50 WEST 50TH STREET**

**NEW YORK 20, N. Y.**

## WHEN YOU CHECK UP ON YOUR PLANT'S PAY-ROLL SAVINGS PLAN FIGURES!

These days, things change with astonishing speed. The Pay-Roll Savings Plan set-up that appeared to be an outstanding job a short time ago, may be less than satisfactory today.

How about checking up on the situation in *your* plant? Checking up to see if everybody is playing his, or her, part to the full measure of his, or her, ability. Checking up to see if 'multiple-salary-families' are setting correspondingly multiple-savings records.

A number of other groups may need attention. For example, workers who have come in since your plant's last concerted bond effort. Or, those who have been advanced in position and pay, but who may not have advanced their bond buying accordingly. Or even those few who have never taken part in the plan at all. A little planned selling may step contributions up materially.

But your job isn't finished, even when you've jacked participation in your Pay-Roll Savings Plan up to the very top. You've still got a job before you—and a big one! It's the task of educating your workers to the necessity of not only buying bonds, but of *holding* them. Of teaching your people that a bond sold before full maturity is a bond robbed of its chance to return its full value to its owner—or to his country!

So won't you start *checking* . . . and *teaching* . . . today?

War Bonds To Have And To Hold!

LET'S ALL BACK THE ATTACK WITH WAR BONDS!

*The Treasury Department acknowledges with appreciation the publication of this message by*

SOAP & SANITARY CHEMICALS

*This is an official U. S. Treasury advertisement—prepared under auspices of Treasury Department and War Advertising Council*

# KOPPERS

chemical raw materials for the soap, insecticide and disinfectant industries

**KOPPERS** Phenol

**KOPPERS** Cresol

**KOPPERS** Cresylic Acid

**KOPPERS** Tar Acid Oils

**KOPPERS** Solvent Naphtha

**KOPPERS** Naphthalene

**Koppers Company,** Tar and Chemical Division, Pittsburgh 19, Pa.

*New-Timely!*

# FEDERAL
## *RUBBER BURN CLEANER*

With the new types of rubber soles and heels made from synthetic and adulterated rubber, rubber burns, caused by sliding and sudden stops on gym, class room and other floors, are more prevalent and very pronounced. These unsightly marks are difficult to remove with cleaners that were developed to remove rubber burns caused by pre-war rubber soled shoes. Federal has met this problem. Federal Rubber-Burn Cleaner removes rubber burns from sealed wood, linoleum and concrete floors quickly, efficiently and without special effort. It is a new product that has been tested under every conceivable condition. It is needed by gyms and schools from coast to coast.

•

*Increase Your Sales—*
*There is a Big Demand*

*Send for Literature*

**FEDERAL VARNISH CO.**
FLOOR FINISH DIVISION
Dept. 544 331-337 S. PEORIA ST.
CHICAGO 7 ILLINOIS

# KRANICH

WAR shortages are bringing about many changes in our line of soaps for jobbers and converters. Fortunately, our many years of experience in the manufacture of quality soaps enable us to make these changes with the minimum inconvenience to our customers. Every possible effort is being made to maintain the quality of KRANICH soaps.

To protect our regular customers we are filling orders on many hard-to-get products on the basis of former purchases. We know you will appreciate the fairness of such a policy.

Plan to consult KRANICH regarding your supply problems. — We may be able to help.

## Shampoo
Liquid Castile Soap

•

## Powdered Soap
U. S. P. Castile (Only)

•

## Potash Soaps
Soft Potash 40%
U. S. P. XII Green

•

**KRANICH SOAP COMPANY**
55 Richards St. Brooklyn, N. Y.

# SOAPS

# MOTH PREVENTIVES

THESE ARE JUST A FEW OF OUR MANY TYPES OF **MOTH PREVENTIVES**

CONSULT US WE ARE SPECIALISTS IN PACKAGING **MOTH PREVENTIVES**

## UNCLE SAM CHEMICAL CO., INC.

Manufacturers Exclusively for the Jobber
Insecticides, Disinfectants, Deodorants, Waxes, Polishes, Soaps, Etc.

*ESTABLISHED* 1920

329 East 29th St. New York 16, N. Y.



*O'er all there hung a shadow and a fear;*
*A sense of mystery the spirit daunted,*
*and said as plain as whisper in the ear*
*The place is Haunted.*
—LONGFELLOW

*Deep into the darkness peering, long*
*I stood there, wondering, fearing,*
*Doubting, dreaming dreams no mortal*
*Ever dared to dream before.*

* * *

*And now as the night was senescent,*
*And star dials pointed to morn,*
*At the end of our path a liquescent*
*And nebulous lustre was born.*
—EDGAR ALLEN POE

## DID YOU EVER SEE A Rat-mare ?

That's the kind of NIGHTMARE Rodents sense when they smell a Skunk or Ferret!

They abandon the Premises as though Plague Stricken.

Rats and Mice flee buildings for quieter, sweeter dreams and safer quarters.

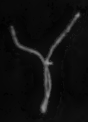
**PETRA**

THE SKUNK'S CALLING CARD

*This is the skunk*
*that caught the rat,*
*that ate the malt*
*—that lived in the house that Jack built.*

Only a TRACE of the PETRA required to give the necessary effect. Mix it with Cedarwood and no odor of skunk remains. But the SCENT is immediately detected by PESTS and VERMIN, who vacate at once!

**SPARHAWK CO., SPARKILL, N. Y., U. S. A.**



# SANITARY PRODUCTS

## A SECTION OF SOAP

*Official Publication*
National Association of Insecticide & Disinfectant Manufacturers

FOR some years public health authorities have thrown up their hands at the suggestion of state or municipal laws requiring the use of a suitable disinfectant in washing dishes, glasses and other equipment in public restaurants. Such laws are impossible of practical enforcement, they state, and in this they appear to be sustained by experience. Nevertheless, in the midst of the present war-boom labor scarcity, particularly for such work as dishwashing in small establishments, the need for some such safety measure would appear to be greater than ever. The spread of infections of one sort or another through improperly cleansed glasses, spoons, etc. may be great, according to some bacteriologists. That it may be a factor in thousands of lost man-hours under present conditions is evident. And although public authorities are skeptical, the subject might well be brought out in the open and reconsidered in the light of present conditions. If there can be an official list of disinfectants for animal husbandry uses, why not for public restaurant, tavern and similar needs?

IF BUYERS of insecticides, disinfectants, and a long list of allied products find that their suppliers are far behind in deliveries of some types of products, they can as a rule today blame it on the container situation. Whether the containers be metal or glass, paper, fiber or wood, their manufacturers are a harassed group trying desperately to spread their output evenly among their customers and to keep up with the pace of demand. Where a container buyer expects to receive a thousand gross this week, they can only ship him one or two hundred, hoping that this will temporarily at least quiet his homicidal desires. Where a year ago, it was a hundred and one raw materials that caused the headaches, today it is containers. And the container manufacturer, swamped as he is with priority orders, labor problems and other war worries, is helpless to do else but sit and take the abuse which is being heaped upon him, — and wish for a return of the pre-war days when orders were fewer and he had to fight for them.

ACCIDENTAL poisonings by white fluoride roach powders in Detroit have brought forth a proposed ordinance in that city restricting all "insecticides and exterminators" and requiring their coloration. This is only one of fifty-seven varieties of coloration laws and ordinances which will eventually be placed on the statute books of states and municipalities throughout the country. In most instances they will be adopted in haste and hysteria following news of insecticide poisoning cases. Without a model or standard to go by, they will each reflect the views and feelings of the moment in the localities where they are adopted. And, as usual, in the case of variation in regulations from state to state, and city to city, the manufacturer selling throughout several or more states will find his position rather difficult.

# SYNTHETIC ROACH PO

## Use of organic thiocyanates in powdered form for roach control in place of pyrethrum

IN THE past, the most commonly used ingredient in non-poisonous roach powders has been pyrethrum. Its allocation solely to military uses over the past two years, however, has stimulated the search for other non-poisonous, but at the same time effective bases for roach powders for both civilian and military uses. During the same time, periodic shortages of sodium fluoride have also had some bearing on roach powder formulation, encouraging a wider use of sodium silicofluoride and other materials, but this has only indirectly affected the manufacture of non-poisonous roach powders. Heavier production of both sodium fluoride and silicofluoride have to a great degree eased the acute shortages which developed early last year. But pyrethrum has remained largely cut off from civilian uses and continues to be virtually unavailable.

One of the most recent innovations in the field of non-poisonous roach powders was the announcement of a new organic thiocyanate material under the name Lethane A-70. This new member of the Lethane family first found use as a contact insecticide in agricultural dusts for control of certain insects of the sucking type. Its success in the agricultural field suggested its possible application in roach control and, according to the manufacturer, it has shown encouraging possibilities in this direction,—satisfactory lethal effects, fast action, safety, ease of handling, etc.,—comparing favorably with pyrethrum powder.

Tests on the new powder conducted by Rohm & Haas are reported to show that killing power on roaches equals results obtained with pyrethrum powder (1.0 per cent pyrethrins) and with sodium fluoride. Tests were conducted on both German and American species of roaches by two methods (Tower Method and Tray Method) worked out in the R & H laboratories. Lethane A-70, manufactured by Rohm & Haas Co., Philadelphia, contains 90 per cent beta beta' dithiocyano diethyl ether. Tests also indicate a high degree of control against ants as well as control of bedbugs superior to that given by pyrethrum powder (containing 0.9 per cent pyrethrins.)

As to other properties of Lethane A-70 as a roach powder ingredient, it is said to exhibit high speed of action, being equal in this respect to pyrethrum, and superior to sodium fluoride. Lethane A-70 demonstrates a high degree of residual activity, samples exposed over a period of 17 weeks showing no reduction in toxic effect. The powder suggested in the manufacturer's formula is said to show good properties of adherence and to work

## TABLE I.—ROACH DOSAGE-MORTALITY DATA

**Test Procedure—Tower Method**
**Test Insect—German Roach (Blattella germanica)**

| Formula | Dosage of Dust 100 MG | 200 MG | 400 MG |
|---|---|---|---|
| | Per Cent Kill | | |
| 10% Lethane A-70—90% Inert | 38 | 51 | 76 |
| Ground Pyrethrum Flowers (1.0% Pyrethrins) | 40 | 50 | 69 |
| 60% Ground Pyrethrum Flowers (1.0% Pyrethrins) Plus 40% Sodium Fluoride | 33 | 53 | 77 |

## TABLE II.—ROACH MORTALITY DATA

**Test Procedure—Tower Method**
**Test Insect—German Roach (Blattella germanica)**

| Formula | Dosage | No. Tests | 72 Hour Control |
|---|---|---|---|
| 10% Lethane A-70—90% Inert | 500 mg | 28 | 87% |
| Ground Pyrethrum Flowers (1.0% Pyrethrins) | 500 mg | 32 | 86% |

## TABLE III.—ROACH MORTALITY DATA

**Test Procedure—Tower Method**
**Test Insect—Adult American Roach (Periplaneta americana)**

| Formula | Dosage | 72 Hour Control |
|---|---|---|
| 10% Lethane A-70—90% Inert | 500 mg | 96% |
| Ground Pyrethrum Flowers (1.0% Pyrethrins) | 500 mg | 100% |
| Sodium Fluoride (100%) | 500 mg | 80% |

## TABLE IV.—ROACH TIME MORTALITY DATA

**Test Procedure—Tray Method**
**Test Insect—German Roach (Blattella germanica)**
**Dosage—5 gms.**

| Formula | Per Cent Control 24 Hours | 48 Hours | 72 Hours |
|---|---|---|---|
| 10% Lethane A-70—90% Inert | 60 | 88 | 96 |
| Ground Pyrethrum Flowers (1.0% Pyrethrins) | 60 | 88 | 94 |
| Sodium Fluoride (100%) | 36 | 80 | 88 |

IN Tables I, II, and III are summarized the results of a series of tests on the thiocyanate roach powder formula in comparison to a straight pyrethrum powder, a straight sodium fluoride powder, and a mixture of pyrethrum powder and sodium fluoride. The evaluations shown in these tables were carried out by means of a dust tower. This method of applying dusts to insects is well developed and permits great accuracy in controlling the dosage applied. Results by this method are easily reproducible in actual practice. It is clear from the results in this test reported for dosages of 100 mg., 200 mg., and 400 mg., that the thiocyanate is as active insecticidally against the German cockroach as 1.0 per cent of pyrethrins and as the mixture of pyrethrins plus sodium fluoride.

In running this test, use is made of a tower which permits the even dispersion of a determined amount of roach powder in such a way as to deposit a uniform film of powder on each roach. The tower is constructed of a heavy glazed paper formed into an upright cylinder 6′ high, 1′ in diameter —supported on the outside by a wooden frame. The cylinder is closed at the top with a wood cap and opens at the bottom into the base upon which it is erected. This base is a box measuring 19″ square on the inside, having an inside depth of 6″. The front of this box is a sliding door which affords easier handling of the tests.

CH POWDERS...

well in the usual bulb type hand duster as well as in mechanical equipment. Toxicological tests indicate that it is of a low order of toxicity,—about one-fifth as toxic as derris or cubé root (containing 5 per cent rotenone)—and that it can be marketed in most states without a poison label.

A further advantage is stated to be its large bulk and consequent economy. Because of its higher bulk, it provides greater coverage, pound for pound, than pyrethrum or sodium fluoride. One pound of the Lethane roach powder will fill a package of 94 cubic inches, as compared with 87 cubic inches for a pound of pyrethrum powder and 20 cubic inches for a pound of sodium fluoride. One of the drawbacks of the thiocyanate ingredient is stated to be its characteristic odor. Lethane A-70 is also said to exhibit a tendency to irritate the mucous membrane of the nose and eyes of some persons. Respirators are recommended when the powder is used on a large scale, or when persons are subject to continuous exposure over extended periods.

At the bottom of the tower above the box, an "L" shaped piece of 3/16" metal tubing is inserted in such a way that the vertical end, which is 2" long, points directly at the center of the top of the tower. The horizontal end of the tubing, which is approximately 8" long, passes out through the base of the tower. This allows about 2" of tubing to extend on the outside over which a short piece of flexible rubber hose can be slipped.

To perform a test, 25 roaches are placed in a circular screen. The screen is 8" in diameter, made of 125 mesh screening, with sheet metal sides 2" deep. This screen is placed on the floor of the box directly under the tower, and the sliding door is closed. The powder is then blown up into the tower and permitted to settle down on the roaches. After a five minute exposure period, the powder has completely settled and the roaches are removed from the screen and placed in clean observation cages with food and water. Periodic observation of the results can then be made at intervals of 24, 48 and 72 hours, etc.

FURTHER evidence of the value of this thiocyanate as a toxicant for use in roach powders is shown in Tables IV and V. These data are based on tests carried out by the tray method, which in its technique tends to approach practical conditions. This method is not as well designed to carry out extremely critical studies as is the dust tower technique, but it does give an excellent picture as to how one roach powder compares to another when tested under conditions simulating practical usage. Again it will be noted that the thiocyanate is at least equal to pyrethrum in both killing power and speed of action and is superior to sodium fluoride in both respects in this type of test.

In setting up the test, 5 gms. of powder is spread evenly to form a circle approximately 2' in diameter, 1" wide and ¼" deep. This circle is inscribed on clean bogus paper spread on the floor of a square tray. The tray measures 3' x 3' and has glass sides 3" high. This provides space outside the circle of powder to place food and

### TABLE V.—ROACH TIME MORTALITY DATA

**Test Procedure—Tray Method**
**Test Insect—American Roach (Periplaneta americana)**
**Dosage—5 gms.**

| *Formula* | *Per Cent Control* 24 *Hours* | 48 *Hours* | 72 *Hours* |
|---|---|---|---|
| 10% Lethane A-70—90% Inert | 85 | 85 | 100 |
| Ground Pyrethrum Flowers (1.0% Pyrethrins) | 100 | 100 | 100 |
| Sodium Fluoride (100%) | 15 | 40 | 75 |

### TABLE VI.—BEDBUG MORTALITY DATA

**Test Procedure—Tower Method**
**Test Insect—Adult Bedbug (Cimex lectularius)**
**Dosage—60 mgs.**

| *Formula* | *Per cent Kill* 24 *Hours* | 48 *Hours* |
|---|---|---|
| Pyrethrum Powder (0.9% Pyrethrins) | 56 | 52 |
| 5% Lethane A-70—95% Inert | 57 | 64 |
| 10% Lethane A-70—90% Inert | 84 | 86 |

The data were provided by Dr. Frank Hazard, Wilmington College, Wilmington, Ohio, from tests conducted under his supervision in the insecticide laboratory of that college. The tower used is of the type known as the Barnhardt tower, which is described in published articles.

### TABLE VII.—COMPARATIVE SPEED OF ACTION

**Test Procedure—Tray Method (10 males, 15 females; 5 grams in ring 15 inches in diameter)**
**Test Insect—German Roach (Blattella germanica)**

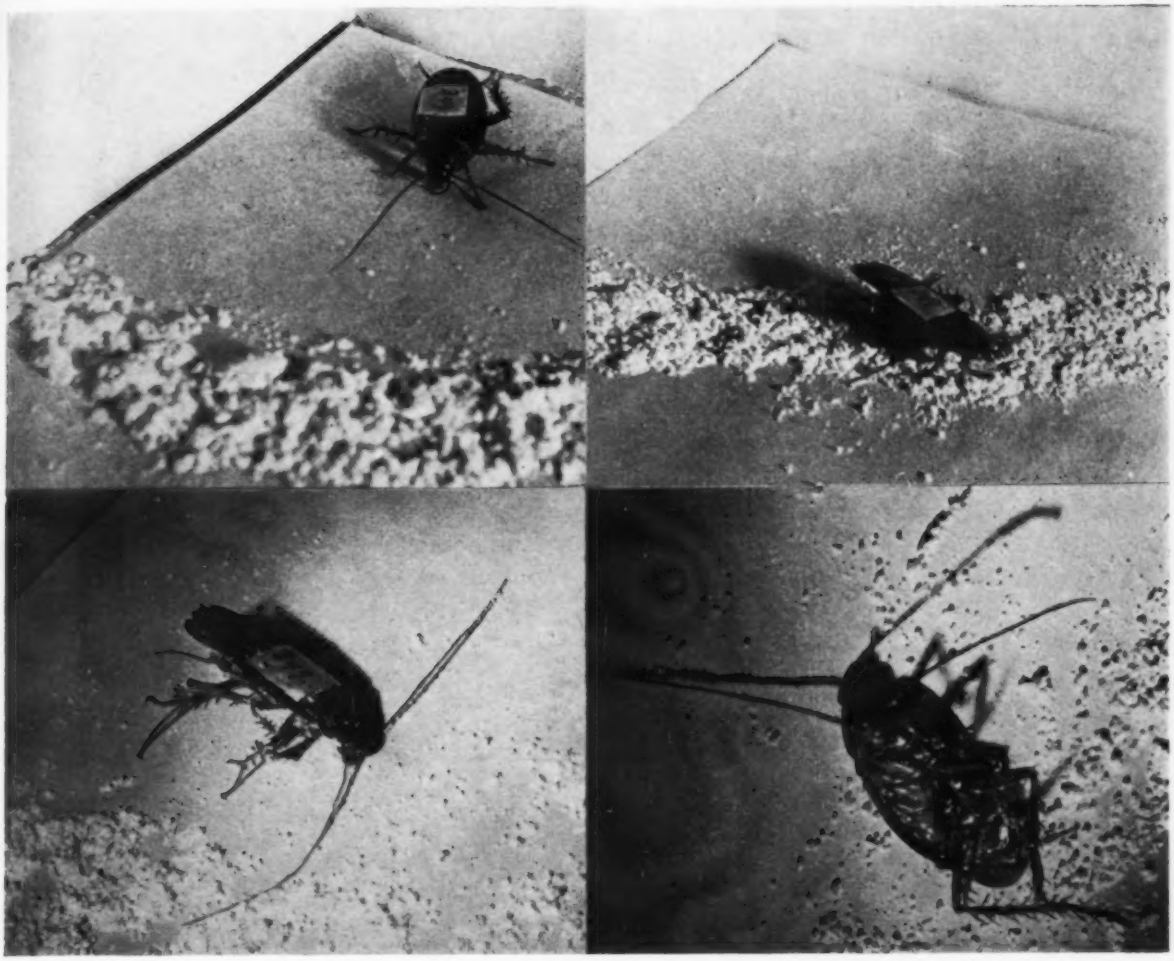
| *Time Interval After Application* | *Insecticide Powder Based on 10% LETHANE A-70* | *Pyrethrum Flowers (Pyrethrins 1.0%)* |
|---|---|---|
| 5 min. | Insects affected; show paralysis. | Insects affected; show paralysis. |
| 15 min. | All insects affected; show distinct paralytic effects. | All insects affected; show distinct paralytic effects. |
| 1 hour | All inactive. | All inactive. |
| 4½ hours | All unable to walk. | All unable to walk. |
| 21 hours | All show paralytic effect; move when prodded. | All show paralytic effect; move when prodded. |
| 48 hours | 6 males and 11 females dead.<br>3 males and 2 females severely paralyzed.<br>1 male and 2 females less affected. | 10 males and 4 females dead.<br>11 females severely paralyzed. |
| 51 hours | 100% dead. | 100% dead. |

### TABLE VIII.

### RESULTS SHOWING THE STABILITY OF LETHANE A-70 ROACH POWDER

**Test Procedure—Tray Method**
**Test Insect—German Roach (Blattella germanica)**

| *Materials* | *Time Powder Exposed* | *Time Roach Exposed* | *% Kill 72 Hours* |
|---|---|---|---|
| LETHANE A-70 Roach Powder | ..... | 72 hours | 100 |
| " | 1 week | 72 " | 96 |
| " | 2 weeks | 72 " | 100 |
| " | 3 " | 72 " | 100 |
| " | 4 " | 72 " | 100 |
| " | 5 " | 72 " | 95 |
| " | 6 " | 72 " | 100 |



water for the roaches. It is suggested that a light film of petroleum jelly be applied to the glass sides in order to prevent their escape.

Twenty-five roaches of approximately the same age and sex are released in the center of the circle, and permitted to pass through the powder to get to the food and water. Observation is then made as to the speed of action, the number that are incapacitated, and the final kill, at intervals of 24, 48, and 72 hours. Modifications of this procedure can be made, such as allowing roaches to cross the line of powder only once—then holding them for the observation periods.

R & H will not manufacture the insecticidal powder. It will furnish the liquid insecticidal concentrate, Lethane A-70, to manufacturers located throughout the country, who will produce the insecticide powder for resale in the small package and bulk package markets. Because of the physical properties of Lethane A-70 and of the particular dry ingredients of the finished formula requisite for maximum effectiveness, considerable skill is required to manufacture the powder properly. The type of equipment required is more elaborate than that commonly employed in mixing dry powders.

—— ♦ ——

### Organic Insecticide

Bis (4-chlorophenoxy) methane and phenothioxin, or a compound such as monochlorophenothioxin are used as the active ingredients in insecticides for agricultural and household use. C. E. Dieter, G. E. Lynn and B. J. Thiegs, to The Dow Chemical Co. U. S. Patent No. 2,330,340.

—— ♦ ——

### Mothproofing Wool

Scoured wool and woolen materials are treated in an acidified aqueous solution of formaldehyde having a pH not exceeding 1 at 20° C., for 2 hours to 2 days. Without drying, the product is then washed until free from the odor of formaldehyde and substantially free from acid. A. McLean, D. Traill and Imperial Chemical Industries Ltd. British Patent No. 549,362.

—— ♦ ——

### Moth Killer

Formaldehyde, picrotoxin and veratrine are added to an alcoholic solution of salicylic and boric acids to produce a moth-killing agent. A. Fuchs. German Patent No. 731,339.

—— ♦ ——

### Grant for Rat Bait Study

The American Medical Association has granted $300 to the University of Illinois for continuation of research on the food preferences of rats, according to announcement from the Urbana institution.

# *Higher power... Lower cost*

# FOR YOUR LIVESTOCK SPRAYS

These facts about Thanite*, the new toxic agent, are substantiated by laboratory findings; field tests conducted by Kansas State College; U. S. Government tests resulting in specification of Thanite for military use†; and growing records of consumer acceptance.

HIGH KILL WITH LOW COST—Just 3% Thanite produces a cattle spray with the killing power of an AA household spray!

QUICK AND LASTING KNOCKDOWN—Peet-Grady tests and field counts show Thanite has *extremely high knockdown* . . . even with high-viscosity base and in low concentration.

LONGER-LASTING REPELLENCY—Whereas most commercial sprays lose repellency after the first hour, Thanite sprays have shown *repellency beyond 7 hours!*

SAFETY—Thanite, itself harmless to warm-blooded animals, is equally harmless in a non-toxic base. Three years in succession, at Kansas State College, Thanite sprays were *proved harmless* to dairy cows.

*Reg. U. S. Pat. Office by Hercules Powder Company.

STABILITY—Thanite does not lose its power even when e posed in flint glass to sunlight for over a year. T helps you avoid packaging problems, losses, ass customer satisfaction!

LOW RESIDUAL ODOR—Even dairy products, most s ceptible of foods, are unaffected in odor or taste w cattle are sprayed with Thanite-based formulatio

†This is a record of fact, not a Government endorsement.

**961 Market Street**

NT-41

# PUBLICATIONS...

NO insecticide material has created as much interest and discussion over the past ten years as that which D.D.T. has developed since the beginning of 1943. For no product have as wide and important insecticidal claims been made as those for D.D.T. by research investigators. Outside of the quick paralyzing action of pyrethrum, D.D.T. is reported to have everything which the ideal insecticide material should have,—high insect mortality, stability, prolonged effectiveness, low cost in use for either household or agricultural purposes, and safety to warm-blooded animals.

D.D.T. which is an abbreviation for dichloro diphenyl trichloroethane, and which is more accurately expressed chemically as 2,2-bis parachlorphenyl 1,1,1-trichloroethane, was first patented as an insecticide material in Germany in 1939, in England in 1940, and in the United States in 1943. The owner of the American patent is the Geigy Company, New York, affiliate of the Swiss dyestuffs and chemical manufacturer of the same name. Other manufacturers in the United States at present, operating only to supply the needs of Allied armed forces, are Merck & Co., Hercules Powder Co. and E. I. du Pont de Nemours & Co. All American production today is allocated by WPB and going into the manufacture of insecticide materials for the armed forces and for lend-lease, chiefly louse powder, but also for some other materials designed for the control of insect borne diseases. The material has also been known under the Geigy trade names of Gesarol and Neocid, but is now generally designated by the manufacturers, the U. S. Department of Agriculture, and the insecticide industry as D.D.T. An intensive research program by the Bureau of Entomology & Plant Quarantine at Orlando, Fla., has been under way for the past year.

**A list of articles, news items, and editorial comment on dichloro diphenyl trichloroethane as an insecticide published during the past few years.**

Because of the wide current interest in D.D.T., a list of recent publications on the product has been compiled. The list follows:

*Anonymous*—Pflanzenschutz. Techn. —Ind. Schweiz. Chemiker—Ztg. 26: 128-129. May 1943. [Abstract in Chem. Zentbl. 114 (II): 458. 1943.]

*Anonymous*—Army louse powder and other insecticidal possibilities of dichloro diphenyl trichloroethane from which it is being manufactured. Soap and Sanitary Chemicals 19 (7): 101, 103, 105. July 1943.

*Anonymous*—Gesarol study pushed in U. S. AIF News 1 (8): 7. August 1943.

*Anonymous*—Insects beware. Chemical Digest 9 (2): 3. Fall 1943. (Publication of Foster D. Snell, Inc., 305 Washington St., Brooklyn, New York.)

*Anonymous*—Issue "Gesarol-Neocid" patent. Soap and Sanitary 19 (10): 131. October 1943.

*Anonymous* — 2,2-bis(parachlorophenyl)-1,1,1-Trichloroethane. Pests and Their Control 11 (10): 17. October 1943.

*Anonymous*—U.S.D.A. set-up for testing army louse powder. Soap and Sanitary Chemicals 19 (11): 104-105. November 1943.

*Anonymous*—The insecticide outlook —the possibilities of supply and requirements in 1944 for rotenone, pyrethrum, thiocyanates, arsenicals and other raw materials. Soap and Sanitary Chemicals 19 (11): 107, 109, 117. November 1943.

*Anonymous*—"Tale ends". Soap and Sanitary Chemicals 19 (11): 134. November 1943.

*Anonymous*—Footprints to progress. AIF News 2 (2): 5. November 1943.

*Anonymous*—"Tale ends." Soap and Sanitary Chemicals 19 (12): 162. December 1943.

*Anonymous*—DDT (Editorial). The Evening Star, Washington, D. C. January 8, 1944, page A-6.

*Anonymous*—DDT to be produced in new du Pont plant. Oil, Paint and Drug Reporter 145 (4): 37. January 24, 1944.

*Anonymous*—The new mystery insecticide. American Fruit Grower, February 1944, page 7.

*Anonymous*—Death to Pediculus. Ind. Eng. Chem. (36 (2): 5. February 1944.

*Anonymous*—Merck expanding DDT output for armed forces. Oil, Paint and Drug Reporter 145 (6): 56. February 7, 1944.

*Anonymous*—The Mystery of DDT (Editorial). Chicago Sunday Tribune, March 5, 1944, part 1, page 18.

*Anonymous*—From Khaki to Mufti. Industrial Bulletin of Arthur D. Little, Inc. March 1944, No. 198.

*Anonymous*—From Explosives to Insecticides. The Chemurgic Digest. February 29, 1944, Volume III, No. 4, page 68.

*Anonymous*—Du Pont Constructing Plant to Make DDT—New Insecticide. Agricultural News Letter (Du Pont), March-April, 1944, Volume 12, No. 2, page 18.

*Carey, Frank*—Death to Body Lice and Flies. Powerful New "DDT" is Answer to Long Sought Need. Pests and Their Control. March 1944, Volume 12, No. 3, pages 20-21.

*OPD Washington Bureau*—Pyrethrum Replaced by New Insecticide. Oil, Paint, and Drug Reporter, June 21, 1943, Volume 143, No. 25, page 7.

*Anonymous*—Hercules to make DDT at Parlin, N. J. plant. Oil, Paint and Drug Reporter 145 (8): 53. February 21, 1944.

*Anonymous*—DDT. Life pp. 36-37. February 28, 1944.

*Anonymous*—"Tale ends." Soap and Sanitary Chemicals 20 (3): 136. March 1944.

*Anonymous* — Meeting in Algiers. Time 43 (10): 62. March 6, 1944.

*Associated Press*—Army finds powerful chemical to fight typhus, insect pests. The Sunday Star, Washington, D. C. January 2, 1944, page A-3.

*Boyce, A. M.*—Gesarol—a promising agricultural insecticide. Citrus leaves. 23 (12): 11, 26. December 1943; also in California Citrograph 29 (3): 76-77. January 1944.

*Geigy A-G., J. R.*—Manufacture of aqueous emulsions for insecticidal purposes. British patent 547,871, accepted September 15, 1942, applied for December 12, 1941.

*Geigy A-G., J. R.*—Manufacture of Insecticidal compositions and the result-

# The *LETHANES*

## TIME-TESTED SYNTHETIC INSECTICIDE CONCENTRATES

*EFFECTIVE • SAFE • UNIFORM • STABLE*

### LETHANE 384
**For Livestock Sprays**

Over a period of 14 years, LETHANE 384 has become the most widely used of all insecticidal agents in livestock sprays, providing the outstanding advantages of quick knockdown, high kill and outstanding repellency at low cost.

### LETHANE 384 SPECIAL
**For Household and Industrial Sprays**

During the past five years LETHANE 384 SPECIAL has been used annually in millions of gallons of household and industrial sprays. It provides fast-killing sprays which are clear, non-staining, mild in odor and low in cost.

### LETHANE 60
**For Agricultural Sprays and Dusts**

LETHANE 60 is a powerful contact insecticide. This concentrate is successfully replacing a large portion of the rotenone and pyrethrum normally employed in agricultural sprays and dusts.

*3 awards to Rohm & Haas Company and its associated firms, The Resinous Products & Chemical Company and Charles Lennig & Company.*

LETHANE *is a trade-mark Reg. U. S. Pat. Off.*

## ROHM & HAAS COMPANY

*WASHINGTON SQUARE, PHILADELPHIA, PA.*

Manufacturers of Chemicals including Plastics . . . Synthetic Insecticides . . . Fungicides . . . Enzymes . . . Chemicals for the Leather, Textile and other Industries

ing products. British patent 547,874, accepted September 15, 1942; applied for December 12, 1941. [Abstracts in Chem. Abs. 37: 6400, 1943; Jour. Soc. Dyers Colourists 59 (2): 33, 1943.]

*Goodhue, L. D.*—New mosquito-control method, developed for army, described. New York Herald Tribune, Section VIII, p. 15, November 21, 1943. [This paper under the title "War against mosquitoes" was presented at the New York Herald Tribune Twelfth Forum on Current Problems, November 17, 1943 and published in 1944 on pages 162-166 of the book "1943 New York Herald Tribune Forum."]

*Gould, George E.*—Recent developments in roach control. Pests and Their Control 11 (12): 12-13, 22-23. December 1943.

*Kotte, W.*—Gesarol ein grosser Fortschritt in der giftfreien Schadlingsbekampfung. Sudwestdtsch. Machr. Obst. u. Gartenbau 1943: 52-53. July 1943. [Abstract in Chem. Zentbl. 114 (11): 1662. 1943.]

*McGregor, E. A.*—Anabasine and Gesarol vs. citrus thrips. California Citrograph 29 (2): 30. December 1943.

*Markwood, L. N.*—Insecticides for postwar markets. Domestic Commerce 31 (25): 7, 8, 21. December 1943.

*Markwood, L. N.* and *Arrington, Laura G.*—New products. U. S. Dept. Commerce, Bureau For. and Dom. Commerce, Industry Report—Insecticides. June 1943, p. 16.

*Markwood, L. N.* and *Arrington, Laura G.*—"DDT" U. S. Dept. Commerce, Bureau For. and Dom. Commerce, Industry Report—Insecticides, November 1943. pp. 3, 12.

*Markwood, L. N.* and *Arrington, Laura G.*—"DDT" U. S. Dept. Commerce, Bureau For. and Dom. Commerce, Industry Report—Insecticides. December 1943, p. 11.

*Markwood, L. N.* and *Arrington, Laura G.*—"DDT" U. S. Dept. Commerce, Bureau For. and Dom. Commerce, Industry Report—Insecticides, January 1944, pp. 3, 11.

*Martin, William H.*—New insecticide hold promise. New Jersey Farm and Garden 14 (12): 20. December 1943.

*Muller, Paul*—Devitalizing composition of matter.—J. R. Geigy A. G., Basel, Switzerland. U. S. Patent No. 2,329,074, granted September 7, 1943; applied for March 4, 1941, in Switzerland March 7, 1940.

*OPD Washington Bureau*—"DDT" is allocated. Oil, Paint and Drug Reporter 144 (25): 5. December 20, 1943. More bugkiller coming. Oil, Paint and Drug Reporter 145 (7): 5, February 14, 1944.

*Questel, D. D.*—Field tests with insecticides to control the European corn borer in early market sweet corn at Toledo, Ohio, in 1943. U.S.D.A. Bur. Ent. & Plant Quar. Publ. E-609, 16 pp., 4 fig. January 1944.

*Sadler, Christine*—Typhus is definitely defeated and war-inspired preventatives have great peacetime values. Washington Post, Section II, p. 1, January 30, 1944.

*Schmid, G.*—Versuche uber Lausebekampfung bein Pferd. Schweizer Arch. f. Tierheilkunde. 85 (5): 1943.

*United Press*—War may lose greatest horror. Washington, D. C. Daily News, January 21, 1944.

*United States Department of Agriculture, Agriculture Research Administration*—Report of the Administrator of Agricultural Research. 1943. 236 pp. 1944.

*United States Department of Agriculture Bureau of Entomology and Plant Quarantine.*—Report of the Chief of the Bureau of Entomology and Plant Quarantine, Agricultural Research Administration 1943. Washington 1944, 58 pp.

*War Production Board*—Allocation order M-340 as amended December 9, 1943. Federal Register.

*Wiesmann, R.*—Ueber neue, wirksame Arsenersatzstoffe im Obsthau und ihre Bedeutung fur die Bienenzucht. Schweiz. Bienen Ztg. 65 (5): 227-229, illus. May 1942.

*Wiesmann, R.*—Winter spraying of fruit trees. Schweiz. Ztschr. f. Obst. u. Weinbau 51: 110-124. 1942. [Abstracts in Chem. Abs. 37: 5822, 1943; Chem. Zentbl. 113 (II): 825-826. 1942.]

*Wiesmann, R.*—Vergleichende Versuche zur Bekampfung des einbindigen Traubenwicklers, Clysia ambiguella mit neuen Mitteln. Schweiz. Ztschr. f. Obst. u. Weinbau 51: 206-220. 1942. [Abstracts in Chem. Abs. 37: 5821, 1943, and Chem. Zentbl. 113 (II): 825. 1942.]

*Weismann, R.*—Neue Versuche mit Arsenersatzstoffen in Obstbau. Schweiz. Ztschr. Obst. u. Weinbau. 51 (7): 155-156; (11): 245-251. 1942. [Abstracts in Chem. Abs. 37: 5822, 1943; Chem. Zentbl. 113 (II): 825. 1942.]

*Weismann, R.*—Eine Neue Methode der Bekampfung der Fliegenplagen in Stallen Anzeiger fur Schadlingskunde, 19 (1): 5-8, January 1943. [Abstract in Chem. Zentbl. 114 (1): 2720. 1943.] (A translation of this article by Carlo Zeimet was mimeographed and distributed by the Bureau of Entomology and Plant Quarantine in October 1943; and printed under the title "Fly Control in Stables" in Soap and Sanitary Chemicals 19 (12): 117, 119, 141, 143. December 1943.)

*Weismann, R.*—Eine neue wirksame Methode der Bekampfung der Fliegenplagen in Stallen. Schweiz. Archiv. fur Tierheilkunde 85 (1): 24-36. January 1943.

*Wiesmann, R.*—Weitere Versuche mit Gesarol im Obstbau. Schweiz. Ztschr. Obst. u. Weinbau 52 (6): 171-204. March 1943. [Abstract in Chem. Zentbl. 114 (11): 170. 1943.]

*Wiesmann, R.*—Neue Untersuchungen uber die Bekampfung der Kirschfliage Rhagoletis cerasi L. Schweiz. Ztschr. Obst. u. Weinbau 52 (6): 232-252. March 1943. [Abstract in Chem. Zentbl. 114 (11): 170. 1943.]

*Zeidler, Othmar* — Verbindugen von Chloral mit Brom- und Chlorbenzol. Deut. Chem. Gesell. Ber. 7: 1180-1181. 1874.

## DDT Committee Meets

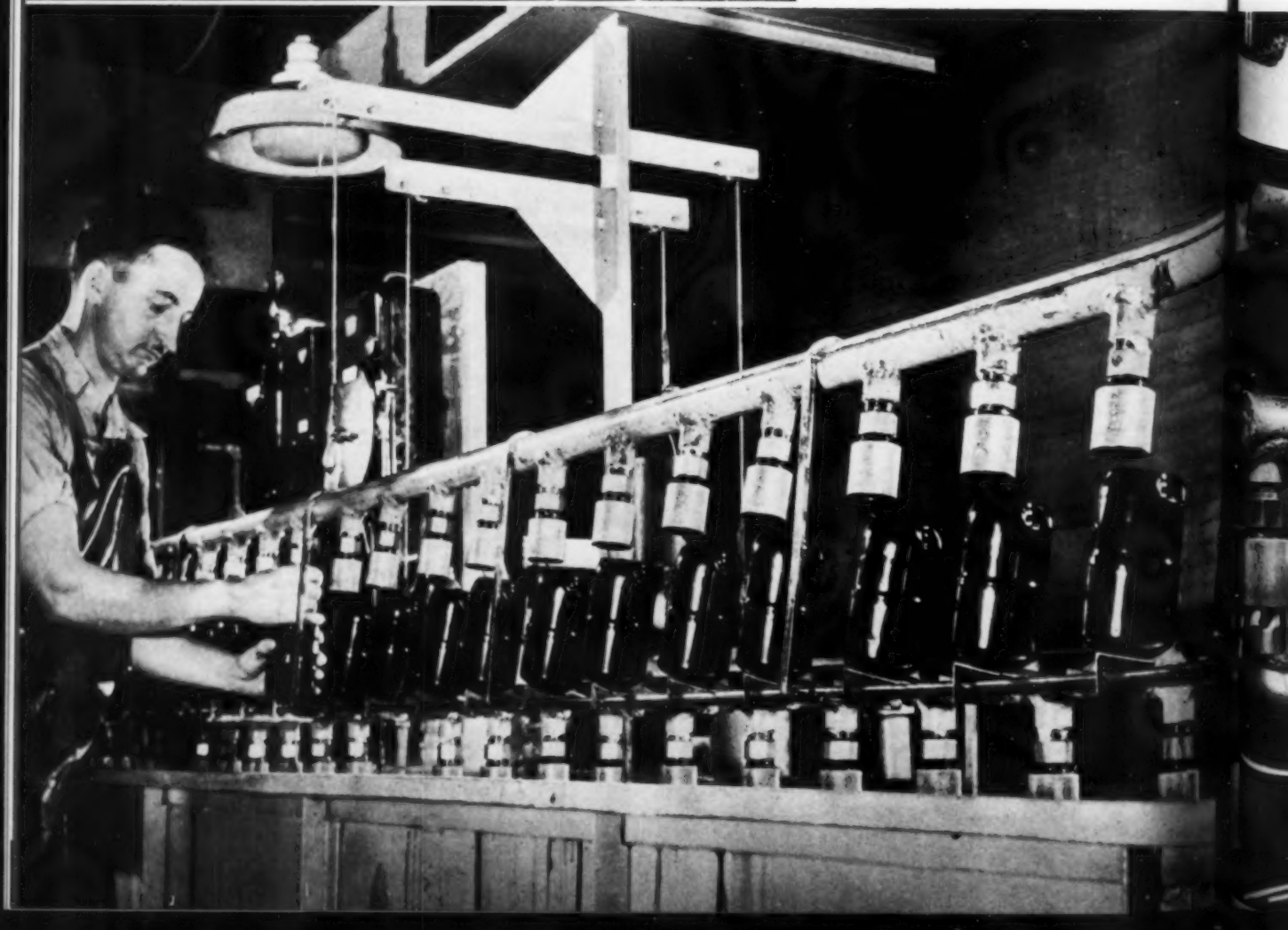
Members of the DDT Producers Industry Advisory Committee held their first meeting in Washington last month. Limited distribution of DDT later this year for agricultural and essential civilian uses is considered possible by the Chemicals Bureau of the WPB, committee members were told. All production is currently going for military uses, but a sharp expansion in output is anticipated over the next few months which may make some civilian use possible. Brig. Gen. Bayne-Jones, chairman of the U. S. Army Typhus Commission, is authority for the statement that use of DDT for louse control in Naples has been effective in cutting new typhus cases from 60 to 10 a day.

The personnel of the committee includes representatives of all producers of DDT as well as producers of chloral from which DDT is made. Those in attendance were H. F. Shattuck of Monsanto Chemical Co., St. Louis, T. H. McCormack of Grasselli Chemicals Div., E. I. du Pont de Nemours & Co., Dr. Oskar Frey, Cincinnati Chemical Works, Norwood, Ohio, F. Marsiglio, Merck & Co., Rahway, N. J., and Paul Mayfield, Hercules Powder Co., Wilmington. Proposals were discussed at the meeting for changing specifications to permit greater production volume. Discussions in this direction are to be continued by technicians from manufacturers' laboratories and representatives of the armed services.

Concentrates rich in pyrethrins I and II were stored in the dark for some months. The concentrates were then no longer completely soluble in petroleum ether, and the insoluble residues showed a high apparent pyrethrin content when assayed. This was in spite of their low toxicity to house flies in comparison with freshly prepared pyrethrum extracts at equivalent concentrations. It is suggested that the change, probably a polymerization, involves the pentadienyl side chain. T. F. West. Nature 152, 660-1.

# AEROSOL PROGRAM

**Westinghouse completes seven millionth aerosol "bomb" for delivery to U. S. Army . . . design of rupture disk called biggest problem . . . anticipate use of DDT in aerosols.**



AN idea of the size of the U. S. Army's aerosol insecticide program may be gained by the recent announcement by Westinghouse Electric & Manufacturing Co., Springfield, Mass., that it had delivered seven million of these aerosol "bombs" to the armed forces up to March 1, 1944. A promising post-war future is seen by Westinghouse for this war-born invention. It comprises a combination container and dispenser for insecticide in the form of a light-weight metal cylinder which can be thrown away after use,—and an insecticide combination of pyrethrum extract and oil of sesame which is atomized by "Freon" gas, dichloro difluoromethane.

Westinghouse has produced these 7,000,000 aerosol "bombs" at its plants in Mansfield, Ohio, and East Springfield, Mass., converting equipment formerly used in the production of household refrigerators. The company's experience with refrigerator manufacture, as well as its equipment for this pre-war product, have been equally useful in carrying out the aerosol program. The aerosol container was patterned after the float valve used in refrigerators, while the gas used to provide the pressure for spraying the insecticide is "Freon," formerly used widely in refrigeration.

***Above left — Paper-thin rupture disks are brazed to the aerosol containers in this electric furnace. Below left—Needle-sized tubes charge the insecticide concentrate into the aerosol containers. Below right—Before filling, the containers are tested for leaks. Under 200 lbs. pressure they are immersed in a water tank.***

Westinghouse and the U. S. Army Surgeon General's office have refused until recently to give details of the design and construction of the aerosol "bombs," and have turned down requests for news, giving military secrecy as the reason. However, the lid now seems to be off, as full particulars are supplied in a recent Westinghouse press release. The container had to be light-weight for easy handling, yet strong enough to stand up to 2,000 lbs. pressure per square inch. (Freon gives about 80 lbs. at 70 deg. F.) The answer was found in a container 44 thousandths of an inch thick, to which a rupture disk,—a sort of safety valve,—was brazed. The design of this rupture disk, and the development of a way to attach it firmly to the can, was reported to be the toughest job of all

(*Turn to Page* 113)

# *Odorless*
# SASOCO DISINFECTANTS

*Phen. Coefs. 2-4-8*

★ ABSOLUTELY SAFE — NON-IRRITATING TO SKIN
★ DESTROYS ALL MICRO-ORGANISMS
★ ELIMINATES FOUL ODORS
★ FORMS QUICK EMULSION
★ STABLE UNDER ALL CONDITIONS
★ CRYSTAL CLEAR, GOLDEN AMBER COLOR
★ AVAILABLE WITH PINE DISINFECTANT ODOR

*ADDRESS ALL INQUIRIES TO*

SANITARY SOAP COMPANY

(Since 1921)

104 Railroad Avenue, Paterson, New Jersey

Also manufacturers of sanitary chemicals, synthetic lubricants, high pressure oils, germicidal cutting lubricants, greases, degreasing compounds and wetting agents.

# WASHBURN FINISHES

are taking more abuse than ever before and still doing a good job in

ARMY CAMPS — INDUSTRIAL PLANTS — SCHOOLS — HOSPITALS, ETC.

Our complete line is still available

SEALS — FINISHES — WAXES

---

## T. F. WASHBURN CO.

2244 Elston Avenue Chicago, Ill.

so far as design of the container was concerned.

The provision for a simple and efficient type of safety valve was essential, since without such a valve the stored containers could build up excessive pressure under certain conditions, such as 180 degree heat in a ship's hold, and explode. The rupture disk was provided to allow for safe release of pressure below dangerous levels. The disk is only three-thousandths of an inch thick, and is shaped like a clover leaf. When pressure builds up to between 350 and 700 lbs. per square inch, the rupture disk gives way and lets the gas escape slowly, eliminating danger of violent explosion.

Design of the disk did not complete the task, as it was next necessary to perfect a way to braze this paper-thin disk to the container,—this problem being complicated by the fact that one surface was fifteen times thicker than the other. The solution to this problem was found, it is reported, by the employment of nitrogen, hydrogen and carbon dioxide at temperatures in excess of 2,000° F.

J. H. Ashbaugh, manager of the Electric Appliance Division of Westinghouse, in making the recent announcement that 7,000,000 of these aerosol containers had been supplied to the armed forces, estimated that the volume of insecticide contained was sufficient to rid a billion army pup tents of insects, or conversely, to kill every insect in every house in North and South America. Post-war sale to a wide civilian market is anticipated, and possibilities are seen for the same pressure spray-container in other than insecticide applications. It has been suggested that by substituting thin paint for insecticide, the dispenser might be used as a spray gun to paint furniture, automobiles, etc.

Several other companies are also reported to be working on aerosol dispensers in addition to Westinghouse. Pennsylvania Engineering Co. of Philadelphia makes larger size containers—two and five-pound sizes—for the Navy. Armstrong Engineering Co., Los Angeles, are turning out a one-pound container for the Army, while Bridgeport Brass Co., Bridgeport, Conn., are turning out a one-pound size for the Navy. Walter Kidde Co., Bloomfield, N. J., are also reported to be experimenting with a small "sparklet" size aerosol unit, which has not, however, gone into commercial production.

In view of the wide expansion in the production of aerosol type insecticides for the armed forces and the limited supply of pyrethrum available for this purpose this year (estimated about 5,000,000 to 7,000,000 lbs. for the U. S. in 1943), research has been extended in several directions to test other products which might be suitable. Tests have been carried on for some months past and are still being carried on with D.D.T. (dichloro difluoro trichloro-ethane) in place of pyrethrum. Reports indicate that D.D.T. is suitable to use in place of pyrethrum and that it is both effective as an insecticide and is safe for warm-blooded animals in the finely-divided aerosol form. Although no official word of approval has been noted from the armed forces for D.D.T. as yet, it is indicated that such is expected. No D.D.T. aerosol "bombs" have as yet been produced for delivery to the armed forces.

### Talks on Castor By-Products

J. Edmund Good, vice-president of Woburn Chemical Corp., Harrison, N. J., spoke on "By-Products of the Castor Plant" at the recent tenth annual Chemurgic Conference held in St. Louis, dealing at length with insecticidal applications of the castor plant. Woburn's agricultural insecticide sold under the trade name "Spra Kast" is made from extractives of the leaves and stalks of the castor plant. While it is a comparatively new product, its use is said to be expanding each year. Stimulating effects on trees and vegetables on which it is used are claimed for it, in addition to its insecticidal qualities. Limitations are recognized for the product in that it is not equally effective against all types of insects, nor is it recommended for all types of agricultural insecticide applications. A wide field of effective application has been found, however, against aphids, thrips, lice, mealy bugs, leafhoppers, red bugs, beetles, leaf rollers, caterpillars, red spider, purple mites, spotted mites, rust mites, melanose and many soft bodied worms.

Arrangements have recently been made with Boyce Thompson Institute, Yonkers, N. Y., to carry out a thorough study of all types of castor plants in order to find out which are the most potent so far as their insecticidal values are concerned. Improved castor insecticides are anticipated as a result of these studies.

### Pyrethrum Toxicity Studies

The results of recent measurements of the absorption of light by the pyrethrins and their derivatives have been considered in relation to the molecular structures of pyrethrin I and pyrethrin II. The relative toxicity of pyrethrin I and II appears to depend largely on the conditions employed. Recent work emphasizes the importance of the carrier medium. For instance, the insecticidal activity of both compounds is far more pronounced in a light than in a heavy mineral oil.

There appears to be no evidence to support the suggestion that pyrethrum flowers contain a third active principle. The results which led to this statement may have been due to the fact that in some of the flowers used for the experiments the chrysanthemum acids were present as esters of alcohols other than pyrethrolone. T. F. West. Chemistry and Industry No. 12, 110-111 (1944).

### Poison for Rodents

Water-soluble polyvinyls and polyvinyls which swell in water, are useful for the preparation of poison pastes for rodents. L. Schutz and M. Meisenheimer, to I. G. Farbenind. A.-G. German Patent No. 731,361.

Reilly
COAL TAR PRODUCTS

# XYLENOLS

● Low boiling, high boiling, and symmetrical. In tank cars and drums from Indianapolis and Newark.

*... and other Coal Tar Products for the Soap and Disinfectant Industries*

**CRESOLS**
● U. S. P., Meta Para, Ortho, and special fractions—to all specifications.

**CRESYLIC ACIDS**
● The entire range—in standard grades or to buyers' specifications.

**NAPHTHALENE**
● Crude and refined prime white Naphthalene in chipped, crystal, flake and powdered form. Purity, 97.8% minimum. Freezing point 79° C. minimum. In 250-pound barrels and 50-pound fiber drums.

**TAR ACID OILS**
● In all grades, from 10% to 75% tar acid content, or of specified phenol coefficiency, carefully blended.

**17 *Plants to Serve the Nation***

Reilly TAR & CHEMICAL CORPORATION

MERCHANTS BANK BLDG., INDIANAPOLIS 4, IND.
500 FIFTH AVE. NEW YORK 18, N. Y.
2513 S. DAMEN AVE. CHICAGO 8, ILL.

## Help Prevent FIRES and ACCIDENTS with

Carey ASBESTO-SORB

Employees cannot do their best, speediest, most efficient work if they must be constantly on guard against falling on an oily, grease-covered floor. You can help your customers save time, money and manpower by supplying them with Carey Asbesto-Sorb.

ASBESTO-SORB is a new, highly improved compound, having an affinity for oil and grease. In its presence, oily deposits are quickly absorbed — disappear almost like magic! Floors are left clean, dry, and *safe*.

ASBESTO-SORB is very economical. Because of its high absorptive power, a given quantity can be used over and over again! It is used dry—nothing to add. Harmless to floors, hands, shoes, clothing. Quickly spread by hand, easily swept up.

Try ASBESTO-SORB — you'll be convinced! Write us today for information and a free test sample. Address Dept. 92.

POSITIVELY WON'T BURN! ASBESTO-SORB is fire-safe . . . rated as "Class I, Non-Combustible" by Underwriters' Laboratories, Inc.

*The* PHILIP CAREY MFG. CO.
*Dependable Products Since 1873*—
Lockland, Cincinnati, Ohio.
In Canada: The Philip Carey Co., Ltd. Office and Factory: Lennoxville, P. Q.

Assembling "Peda-Spray" at the Fairfield, Iowa, plant of the Dexter Company

# *New* Spray Device *for* ATHLETES FOOT CONTROL

IT is quite ironic that the shower bath,—a typically American mechanical development which has done so much to lift our standards of personal hygiene and cleanliness—should at the same time present the greatest medium for spread of ringworm of the feet, commonly spoken of as "athlete's foot." Prophylactic measures to provide effective control in the shower bath have long been sought, but to judge by the formidable increase in spread of the disease the usual type of foot bath which has been most commonly used in the past is not the final answer to this problem.

Sodium thiosulfate solutions are customarily used in these foot baths, and bathers are urged to immerse their feet after using the showers, on their way to bathing pools, dressing rooms, etc. There are several very definite disadvantages in this type of treatment, however, the principal failing being that after the solution of sodium thiosulfate stands in the open pan for several hours it loses its strength, becoming diluted by water from the feet, dripping from the body, etc. There is even considerable opinion to the effect that such baths often provide a source of infection rather than guarding against it.

A further disadvantage of these footbaths is that the subjects they are supposed to protect often avoid the baths for esthetic reasons. The pans very rapidly become littered with hair, papers, cigarette butts, etc., presenting an anything but inviting appearance. To be kept in satisfactory condition, and to offer any dependable degree of protection, the tanks would require cleaning and change of solution every three or four hours, the cost of materials and labor making such servicing rather uncommon.

A new method of approach to this problem has been adopted in an automatic mechanical device recently introduced by the Peda-Spray Company of Seattle, Wash. The "Peda-Spray" machine consists of a round tank, equipped with three pumps, and topped by a circular grill. When a person steps on the grill this automatically depresses the pistons of the pumps, atomizing the solution through two openings in each pump and producing a cloud-like spray which completely envelops the feet. The main advantage over other types of baths is that every application consists of a fresh, clean solution which has not been contaminated by previous usage.

Tests of the new device over a considerable period are said to have demonstrated that it requires a minimum of care, that it will stand up under constant use with a minimum of mechanical complaints, that it offers effective prophylactic control, and that bathers will use the treatment voluntarily and consistently.

The capacity of the dispenser is three and one-half gallons of solution which is said to be sufficient for over ten thousand treatments. The solution sold with the device is compounded from materials which have proved effective in the control of ringworm of the feet, such as salicylic acid, thymol iodide, eucalyptus and menthol.

Assistance in designing the machine and in putting it on a basis of quantity production have been rendered by the Dexter Company of Fairfield, Iowa. The accompanying photograph illustrates assembly of the "Peda-Spray" device at the Dexter plant.

**MODERN EQUIPMENT** **SPACIOUS QUARTERS** **EFFICIENT OPERATIONS**

***ANNOUNCING OUR NEW PLANT***—A modern plant complete in every detail—scientifically designed laboratory under skilled direction to insure constant control of every manufacturing step and a continual search for new and improved methods and materials — Lower costs made possible through economies effected by increased production — Engineered plant design and equipment results in a saving which we pass along to our customer — Your inquiries solicited on the products manufactured by us.

| | | |
|---|---|---|
| SOAP FLAKES | VEGETABLE OIL SOAP | PINE OIL DISINFECTANTS |
| SOAP POWDER | LIQUID HAND SOAP | DISHWASHING COMPOUNDS |
| GRANULATED SOAP | LIQUID SCRUB SOAP | HAND DISHWASHING COMPOUNDS |
| SCOURING PASTE | POWDERED HAND SOAP | DETERGENTS |

**WESTERN CHEMICAL & MFG. CO.**
2500 West 21st Street Chicago 8, Illinois

STAIN-FREE

**FULL FLOATING**

**PENN-DRAKE**

*Insecti-sol*

. . . all the sticky, smelly fractions removed—to produce an insecticide base so free-floating, pure and crystal clear it can be sprayed on delicate fabrics without danger of stains or spots—yet will float longer, penetrate deeper and maintain maximum toxic action. For a really satisfactory insecticide of highest quality—specify Penn-Drake Insecti-Sol.

**MOTHICIDE**

Penn-Drake Odor-Free Naphtha is also a super-fine base which provides a more permanent dependable Mothicide. Write Dept. 109 for complete details on Penn-Drake products for Pest Control.

penn drake petroleum products

**PENNSYLVANIA REFINING COMPANY**
General Offices: BUTLER, PA. · Refineries at KARNS CITY and TITUSVILLE, PA.
*Makers of White Oil, Technical Oil, Petrolatum, Petroleum Sulphonates, Etc.*

# OVER THE TRANSOM

*by Preston Peaker*

WASHINGTON — This is the first of a new so-called column which will appear here occasionally, every month if enough gossip is available and the publishers continue to show a willingness to pay a wage and expenses for snooping around this fair city and its environs. If perchance, dear reader, this alleged column is missing from these pages, you will then know that the publishers have determined that enough is enough, or that your correspondent's draft board has decided that his health has improved sufficiently for him to vacate his niche in 4-F. Because of his unique position at present, his years in and around the drug, chemical, insecticide and allied industries, and in the interests of bodily safety, your correspondent feels that he must for the present at least dish up his literary goulash hidden behind a *nom de plume*. Any reader with homicidal intentions must therefore be referred to the editor.

* * *

*Over the Chemical Division of WPB and its sub-groups in Tempo S, a strange calm appears to have fallen of late. The hubbub and rush of yesteryear are gone. They say that many of the boys from industry now know what they are doing and no longer get excited over a little government red tape.*

* * *

**Naphthalene for moth prevention will become acutely scarce. Big increase in production of insect repellents for the armed forces will use all available dimethyl phthalate. This is made from phthalic anhydride which in turn is made from naphthalene. Looks like no moth balls for 1945!**

* * *

Seen last week in Washington en route South — Eddie Aldrich, demon of United Drug Purchasing division in Boston, headed for the Alabama strawberry mines to buy a few hundred tons for U.D. Purchasing agents travel these days!

* * *

*The Army has approved D.D.T., the new insecticide material which has the Dept. of Ag all agog, for its freon aerosol "mosquito gas" for use in the tropics. Questions of poisonous character of D.D.T. answered by Army approval. It is to be used to stretch pyrethrum in aerosol insecticides because there is not enough pyrethrum to supply the millions more of these insecticide "bombs" needed by the armed forces. Increased output of freon has eased the tight situation in this product. D.D.T., pyrethrum and freon all continue under strict "for military use only."*

* * *

**D.D.T. reports say that Sherwin-Williams and Pennsylvania Salt are about to begin manufacture of the product. And that General Chemical and Monsanto Chemical are looking over the possibilities carefully. Monsanto now makes the raw material. If these four go into D.D.T., it will make eight including Geigy's Cincinnati Chemical, patent owners.**

* * *

Manufacturers of metal goods just do not want to be bothered making hand sprayers for insecticides under present conditions, says the secretary of a national trade association. He points to the WPB records on steel.

* * *

*Arabs in North Africa resent continuation of American attempts to delouse them. They prefer to be lousy. Army is said to be threatening to pass the problem to the State Department as it assumes something of a diplomatic complexion.*

**Rosin will be extremely scarce and tight in 1945, say the naval stores experts. Production is being cut sharply by lack of labor and equipment. Soap manufacturers and other users will feel the real effects of the shortage early in 1945.**

* * *

A frequent visitor to Washington as a member of several WPB industry advisory committees — spices, food, insecticides—is L. W. Jones, McCormick & Co.'s big energy and muscle man from Baltimore. Doorman at Tempo S is reputed to ring warning gong when he arrives for WPB conferences so department officials can don football suits.

* * *

*Plans of the Paper Division of WPB to issue an order covering use of carton board,—similar to the order on shipping containers, L-317, are reported to have been abandoned, at least for the moment. So overwhelming has been the avalanche of appeals filed against the quotas set up in L-317 that the Paper Division has apparently decided that discretion is the better part of valor, and they have enough appeals, thank you, for the moment. Perhaps they have even decided to get the order right before issuing it, and head off another appeal avalanche.*

* * *

**Owing to the heavy demand for freon for use in the manufacture of aerosol pyrethrum insecticides for the Army and Navy mosquito control, predictions are being made that only about half the usual quantity will be available for railway car air conditioning this coming summer. This will mean that only half of the 8,000 railway passenger cars usually cooled by refrigeration, will be air conditioned. This will be in spite of a new freon plant now being built by Kinetic Chemicals, Inc.**

* * *

Offhand, we would say that Jergens have got their full share of lotion publicity from the spotlight which has been focused on one W. Winchell by Mr. Dies and other members of Congress.

* * *

*That's all for now. But do not miss our next installment. Between now and June 1, your correspondent plans really to look through a few keyholes.*

*Jobbers!*

**SELF POLISHING**

# FLOOR WAX

- *Lowest Prices*
- *Highest Quality*
- *Rich Carnauba Base*

*Write for Samples, Prices and Further Information*

M & H LABORATORIES

2705 ARCHER AVE. CHICAGO, ILL.

***PLEASE NOTE...***

We have moved our general offices to:—

**225 Plymouth Building**
**E. 22nd and Prospect Ave.**
**Cleveland 15, Ohio**

Our factory remains at 2450 Canal Road, where we will continue to manufacture a high quality line of:—

**DISINFECTANTS**
**INSECTICIDES**
**CLEANING COMPOUNDS**
**POLISHES**
**DEODORANTS**
**ETC.**

Please mail your orders and inquiries to our new address where your needs will receive our prompt attention.

**THE CHEMICAL SUPPLY COMPANY**
CLEVELAND, OHIO
*"SINCE 1898"*

# TRADE NEWS . . .

### Brenn Group's Garden Book

A Huntington County, Ind., "Victory Garden Guide," which was prepared and published recently, lists J. L. Brenn, head of Huntington Labs., Huntington, Ind., as director of the Huntington County Civilian Defense Council, which is sponsoring the guide. The booklet was prepared by the Huntington County Agricultural Extension Service and contains several pages about what and when to raise in victory gardens, how to care for them, how to preserve, can and store food and how to identify, and destroy home garden pests.

### Waxes Industry Committee Named

A vegetable waxes industry advisory committee, composed of ten representatives of importers and dealers in such waxes as carnauba and ouricury, imported from Brazil; candelilla, from Mexico; beeswax, imported from many different parts of the world, and domestic beeswax, has been named recently by the Office of Price Administration. The committee members named, were: C. S. Bullock, American Cyanamid & Chemical Corp., Charles Christman, Smith & Nichols, Inc., J. L. de Lyra, Wessel, Duval & Co., Arthur A. Hoffman, Strohmeyer and Arpe Co., E. Schuemann, D. Steengrafe & Co., J. E. Godoy, W. R. Grace & Co., all of New York, and Roy A. Grant, Dadant & Sons, Hamilton, Ill., Fallon O'Byrne, Bee Industries, Ltd., Alhambra, Calif., Alan Root, A. I. Root Co., Medina, O. and Frank B. Ross, Frank B. Ross Co., Hoboken, N. J.

### WPB Allocates Spray Gun Material

Material for only 3,200,000 spray guns for the first six months will be allocated to six companies manufacturing them, the War Production Board announced last month. In so doing, the WPB asked that householders use their spray guns with "extraordinary care" this year. The allocation of materials for the guns is considerably below the Office of Civilian Requirements' estimated demand for 5,000,000 spray guns.

### Charles Opitz Commissioned

Lt. Charles L. Opitz, son of Charles F. Opitz, president of John Opitz, Inc., Long Island City, N. Y., well-known insecticide manufacturers, was commissioned a second lieutenant in the U. S. Army Air Force Communications Section on April 13 last. Lt. Opitz is a graduate of the McBurney School, New York, and attended St. Lawrence University, Canton, N. Y. for three years, breaking off his college course to enlist in the Air Force in August, 1943. He attended officers' training school and the Army Air Force communications school at Yale University, being commissioned upon graduation. At present he is taking an advanced course in communications at Boca Rotan, Florida.

### Bagley Labs Starts Operations

Horace L. Bagley has recently organized Bagley Laboratories, with plant and offices at 806 E. 136th Street, New York City, and will engage in the manufacture of potash soaps, polishes and waxes. Mr. Bagley has been connected with the manufacture of these products for a period of approximately twenty years. He was formerly assistant director of research for R. M. Hollingshead Corp., Camden, New Jersey, leaving this position approximately three and one-half years ago to join Buckingham Wax Co., Long Island City, as production manager and research director. He left the Buckingham Wax organization the first of this year, and meanwhile has been organizing his new company.

### New Detroit Insecticide Law

An ordinance to regulate the sale and use of exterminators or insecticides containing sodium fluoride, sodium silico fluoride or any other poisonous compound is now under consideration by the City Council of Detroit. Provisions of the new ordinance include, among others, the following requirements: (1) that the package shall be labelled with the symbol of the skull and crossbones in red, beneath the word "poison" and above the following: "This exterminator or insecticide contains (name and percentage of poison), a deadly poison. Do not use this powder where it may contaminate food products. The accepted antidote for this poison is: (describe antidote) . . . Distributed by: Name . . .address . . ."; (2) powder must be colored nile blue; (3) food handlers must not have any insecticides or exterminators on their premises that do not conform to the other provisions of this ordinance. Recently in Detroit a white powder insecticide was mistakenly used for flour in a restaurant, resulting in a multiple death episode.

### Issue DDT Reports

A series of reports issued by the Bureau of Economic Entomology & Plant Quarantine of the U. S. Department of Agriculture covering research investigations by that Bureau into the uses and effectiveness of DDT has been published in the February number of *The Journal of Economic Entomology*, recently issued. The series comprises over fifty reports on DDT as tested against a long list of both agricultural and household insects. Reprints of the reports may be obtained at twenty-five cents each or five for one dollar by communicating with Ernest N. Cory, business manager of the Journal, at College Park, Md.

### Amend N. Y. Sanitary Code

The following amendment to the New York State Sanitary Code has recently been approved by the New York State Public Health Council, and will become effective January 1, 1945:

CHAPTER IX

Certain Health Hazards.

REGULATION 9. *Poisonous insecticides and exterminators.* The term insecticide or exterminator as used herein shall mean and include any substance containing a poison used for the destruction or control of insects, fungi, vermin, rodents, or other pests, provided that the term shall not include fumigants nor products sold for manufacturing or non-insecticidal purposes. The term poison shall mean any drug, chemical or preparation which is liable to be destructive to adult human life in quantities of sixty grains or less. The sale, distribution, possession, or use of an insecticide or exterminator is prohibited unless the container bears a label legibly and conspicuously printed with the word "POISON" and the symbol of the skull and cross-bones in red, together with the antidote therefor and the name and address of the manufacturer, packer, or distributor. Bags, packages, barrels, and drums used as such containers shall have the word "POISON" and the skull and cross-bones indelibly printed, painted or stenciled thereon. The word "POISON" shall be in bold-face type of a larger size than the other wording except the name of the product and of the manufacturer, packer, or distributor.

Insecticides or exterminators in the form of a white powder consisting wholly of or containing arsenic in its elemental form or in any of its combinations or fluorine in any of its combinations if sold, offered for sale, or otherwise possessed or used shall be colored blue, red, or green to an intensity not less than value 8 chroma 4 in accordance with the Munsell System of Color Notation or to a neutral shade corresponding to a value of 7.0 according to said system. Such insecticides or exterminators when intended or used for agricultural purposes need not be colored unless kept, stored, or used in a room in which food is manufactured or prepared or in which powdered food is stored for purposes other than commercial storage or storage in transit.

This amendment shall take effect January 1, 1945.

### Air Sterilization

American Sterilizer Co., Erie, Pa., is introducing to industrial markets the new "Hygeaire Ultraviolet Germicidal Radiation System" which is said to have been tested by over 400 hospital installations. The device consists of a tubular G-E germicidal lamp backed by a patented reflecting fixture which is designed for mounting on any wall or partition to protect radiation horizontally at a height above eye level. The theory is that air currents moving up and down in a room by convection carry air-borne bacteria and viruses through the radiation, effectively neutralizing them. The germicidal effect is said to be that of over 100 air changes an hour.

### Washington PCOs Reorganize

A meeting of pest control operators in Washington, D. C., was held early in April at which the local association, which has been inactive since 1935, was reorganized. The group discussed the increasing local problem of vermin and rat infestations which has been made more serious recently due to overcrowding and the local housing shortage. A suggested program of rat control was adopted and a committee was named to represent the pest control industry on a joint committee with the American Restaurant Association. Serving on this committee are P. Calvert Cissel, American Disinfectant Co., William Walton, Western Exterminating Co., and Robert Byrne, Apex Exterminating Co. The reorganized Washington association has not elected new officers but at each meeting will name two members to arrange for the succeeding meeting. William Walton will act as chairman for the next meeting, with J. A. Macaboy, Exterminating & Control Service, as secretary.

### Prof. Exterminators Assn. Meets

Members of the Professional Exterminators Association met at the Hotel Commodore, April 19th, for a showing of four sound pictures dealing with rat and mouse control. Ernest M. Mills, of the Division of Predator and Rodent Control, U. S. Department of the Interior, was in charge of the program and answered questions presented by various members of the group following the showing of the films.

### Killeffer Joins Hazard Adv.

D. H. Killeffer, chemical writer connected with *Industrial & Engineering Chemistry* and *Chemical & Engineering News*, has just joined the staff of Hazard Advertising Co., New York, to direct publicity and public relations activities for the clients of the agency.

### Issue Phenol Label Interpretation

An interpretation of the requirements of the food, drug and cosmetic act as they relate to the labeling of products for external application which contain phenol has recently been issued by the Food and Drug Administration, Washington. It states:

> Our present view on products containing phenol is that those articles which contain 1 per cent or less of phenol need not bear warnings of any kind. Those containing more than 1 per cent but not more than 2 per cent should bear warnings against applying to large areas of the body and that a bandage should not be used when the product is applied to fingers and toes. If the product contains over 2 per cent phenol, we would not ordinarily regard it as safe for indiscriminate distribution unless it were offered for spot application, or unless there was something unique about the composition which would cause us to modify our views.

### Harnden Heads Dow Insecticides

Robert C. Harnden has just been named head of the Dowicide Division of the Insecticides Department of Dow Chemical Co., Midland, Mich. Included in the "Dowicides" family are a group of special insecticides, germicides, fungicides and disinfectants. Another personnel change brings Theodore Riedeburg from the Chicago office to the home office in Midland to work under J. Carl Dawson in the fumigants division.

### Cancel Amer. Home Merger Plans

Plans which have been under consideration for the merger of American Home Products Corp., Jersey City, N. J., and Norwich Pharmacal Co., Norwich, Conn., have been abandoned, according to a joint announcement by Knox Ide, president of American Home, and Frank L. McCartney, head of Norwich Pharmacal.

### DCAT Section Moves Offices

The Drug, Chemical and Allied Trades Section of the New York Board of Trade is now located in new quarters at 291 Broadway, New York. The section moved to the new quarters on May 1, where it occupies the entire fourth floor.

# N.A.I.D.M. Program Lists DDT, New Disinfectants, Aerosols for June 12-13

WAR and post-war problems and developments, including speakers and discussions on DDT, the newer synthetic disinfectants, aerosols versus spray insecticides, dermatitis prevention, safety in floor finishes, and a number of other subjects are listed on the program for the 30th annual mid-year meeting of the National Association of Insecticide & Disinfectant Manufacturers to be held at the Edgewater Beach Hotel, Chicago, on June 12 and 13. The tentative program for the meeting was recently announced by John Powell of **John Powell** & Co., chairman and C. R. Cleveland of the Standard Oil Co. of Indiana, vice-chairman. The meeting will extend for two days with group luncheons each day, preceded by a meeting of the Board of Governors and various scientific committees on Sunday evening, June 11. Several of the subjects on the program will be in the form of symposia and general debates. The tentative program follows:

MONDAY MORNING, JUNE 12th
Henry Nelson, *Presiding*

9:00 A. M. Registration — Michigan Room.

10:00 Meeting called to order.

Address of President, Henry A. Nelson, Chemical Supply Co.

Report of Secretary, H. W. Hamilton, Koppers Co., White Tar Division.

Appointment of Committees.

Roll Call and Introduction of Guests.

Post War Planning Committee—Melvin Fuld, Chairman.

Committee for Economic Development. Speaker: Mr. Newton C. Farr, Farr & Co., Chicago.

"Control and Prevention of Dermatitis in Industry." Speaker: Dr. Louis Schwartz, U. S. Public Health Service.

"Red Squill." Speaker: Dr. D. C. Green, Fish and Wild Life Services, U. S. Dept. of Interior.

12:30 P. M. Group Luncheon.

AFTERNOON SESSION

N. J. Gothard, *Presiding*

*Edgewater Beach Hotel, site of coming N.A.I.D.M. meeting.*

**JOHN POWELL**
**. . . in charge of program**

2:00 Meeting called to order.

Announcements.

"Review of Synthetic Disinfectants and Their Probable Post-War Position." Speakers: Dr. W. L. Mallman, Mich. State College; C. G. Marshall, Winthrop Chemical Co.; H. M. Corley, Armour & Co.

3:30 "Dishwashing Sanitation" — W. A. Hadfield, Pennsylvania Salt Refining Co.

3:45 General Debate—"Aerosols vs. Spray-Type Insecticides."
Chairman—C. E. Smith, Socony-Vacuum Oil Co.

Aerosols—Dr. Lyle D. Goodhue, U. S. Dept. of Agriculture, W. W. Rhodes, Kinetic Chemicals, Inc.

Sprays—N. J. Gothard, Sinclair Refining Co., R. O. Cowin, Standard Oil Co., Ohio.

TUESDAY MORNING, JUNE 13th

G. M. Baird, *Presiding*

9:30 A. M. Meeting called to order.

Announcements.

"The Place of Insecticides and Disinfectants in the Prevention of Insect-Borne Diseases." Speaker: Dr. Gilbert A. Dunnahoo, U. S. Public Health Service.

Symposium on Post-War Sprayers. Discussion Leader: F. C. Nelson, Stanco, Inc.

"Sanitation in the Dairy Industry." Speaker: Dr. L. K. Riggs of Kraft Cheese Co.

"Are Household Insecticides Luxuries?" Speaker: Dr. O. F. Hedenburg of Mellon Institute.

12:40 P. M. Luncheon.

# *A Good Source of Supply for*

LIQUID SHAMPOOS • LIQUID TOILET SOAPS • SURGICAL SOAPS
LIQUID FLOOR CLEANSERS • DISINFECTANTS • POLISHING CLOTHS
VEGETABLE OIL JELLY SOAPS • • • LIQUID METAL POLISH
SPECIALTY PRODUCTS

All "HAAG SOAPS" are made with the same care now as in prewar days — completely saponified — laboratory controlled under the supervision of experienced, graduate chemists — filtered while refrigerated.

*Write for wholesale price list and samples*

**HAAG**
**LABORATORIES, INC.**
6101 S. MAY ST., CHICAGO, ILL.

**Flexibility In Crutcher Performance**

The HUBER ELECTRO PERFECTION CRUTCHER offers a choice of four forward and reverse speeds. The flexibility in operating technique afforded by this wide choice of crutcher speeds should be decidedly interesting to many soap makers. Available in three sizes,—1,500, 2,400 and 3,200 pounds.

**HUBER MACHINE CO.**
*"Builders of Good Soap Machinery for the Past 45 Years"*
265 46th STREET BROOKLYN, N. Y.

CHEMICALS METALS · ORES

Phosphates

Carbonate of Potash

Soda Ash

Caustic Soda

Cresylic Acid

*Philipp Brothers, Inc.*
70 PINE STREET, NEW YORK 5, N. Y.
HARTFORD BOSTON PROVIDENCE
PHILADELPHIA BALTIMORE

AFTERNOON SESSION
Henry Nelson, *Presiding*

2:00 Meeting called to order.

Announcements.

"On Post-War Floor Treatments Back Your Front." Speaker: Mr. Elliott Spratt, Hillyard Company.

"What is a Safe Floor Finish?" Speaker: Sydney V. James, Engineer Underwriters' Laboratories, Inc.

Discussion of DDT. Speaker: Dr. V. Froelicher of Geigy & Co.

Toxicology of DDT. Speaker from U. S. Surgeon General's Office.

Report of Insecticide Scientific Committee on Roach Testing Methods—F. C. Nelson, Stanco, Inc.

"Insecticides in Europe at War." Speaker: Dr. Maria Pulaski.

# Discuss War Problems at Sanitary Assn. Meeting

THE 22nd annual convention of the National Sanitary Supply Association was held April 24 to 26 at the Hotel Morrison, Chicago, with over 260 manufacturers and distributors in attendance. Indicative of the growing appreciation of what the organization is contributing to the sanitary supply industry's welfare was Secretary Harry Apple's announcement that during the past year 55 new members have been added, bringing total membership to the all-time high of 228.

President Marshall L. Magee, in opening the sessions, revealed a further flattering sidelight on the industry's contribution to the war effort, as observed in his countrywide trips. "I never realized," said Mr. Magee, "how exacting is the job we are doing in supplying two war fronts until I saw hundreds of thousands of gallons of disinfectants, great volumes of soaps, cleaning compounds and other products being loaded for service abroad. And yet there is still plenty for the home front, too."

He saw presidents, vice presidents, secretaries and treasurers, in old clothes, Mr. Magee said, working on production lines, driving trucks, doing all kinds of work necessary to insure delivery of sanitary supplies on time where wanted. And he expressed pleasure in evidence he found that manufacturers and distributors are forgetting competitive rivalries and cooperating to serve the war agencies.

"We're tackling the hardest task of the war right now," said Mr. Magee. "Sanitary products are essential to the invasion program. If the invasion proves easy, there'll be more and better products for civilian use. If the job is tough, there'll be less for the home front. But, regardless of hardships, our industry is in on this task without reservations. We're ready for any call and we're willing to share in the outcome."

Formal sessions of the convention were divided between consideration of current problems and exploration of what the post-war period may hold. Setting the pace, an advertising agency executive, Carlyle Emery, brought to the opening session a discussion of the small business man's part in preserving America's business traditions.

Following him, Lyle C. Palmer, plant sanitation manager at Kingsbury Ordnance Works, La Porte, Ind., presented his views, based on wide practical experience, of what the building maintenance supervisor seeks in services and supplies from distributors of sanitary products. He emphasized the industry's need for "the engineer type of salesman." Significantly, he drew a contrast between the small firm which "will give me time and assistance in solving my cleaning problems," and the large firm with one product and a "take it or leave it air."

Viewing the future, Ludwig Wilson of the Chicago firm bearing his name, raised the question of what can be expected from television as an aid to salesmanship. "Will a television set, instead of a sample case, make it possible to show the prospect in his office what we have for him in our offices?" he asked. Recalling the early days when the price of janitor equipment was "what the customer was willing to pay," he found satisfaction in the present use of catalogs, with standard descriptions and established prices. "It is certainly a real step in the right direction," he said. "But if we are to continue, we must insist on known quality and high ethical ideals, for not otherwise can we have the unqualified confidence of the buying public."

"This industry cannot turn off the war and turn on civilian business just like that," was the assertion of Louis Herzog, of Riddiford Bros., Inc., Chicago, and past president of the Association, in discussing "Post-War Readjustments." He suggested the need for a carefully developed merchandising plan; a highly trained sales personnel; an advertising program and an intelligent purchasing policy. Also worthy of deep consideration, he declared is the problem of disposal of surplus government supplies "in such a manner as not to upset the national economy."

Looking to the future of the insecticide and disinfectant business, Jules Lovinger, of Lovinger Disinfectant Co., Salt Lake City, Utah, saw in the employment of war veterans as salesmen one key to post-war success. Personal contact, rather than solicitation by telephone, he pointed out, has always been the most effective method for selling insecticides and disinfectants, and he added, "I believe this means the incorporation of war veterans into the sales force." New companies, organized by individuals looking for a source of quick income, will mushroom into being after the war, Mr. Lovinger warned. But, like many a new insurance agent, after they have sold all their friends, they'll soon be looking for other employment, he asserted, and the old, established firm with time-tested products and experienced salesmen, will continue to handle the bulk of the business.

The market for soap is still

# METAPLUS

an alternate for

TRISODIUM PHOSPHATE

▼ ▼ ▼

**METAPLUS** cleans better, costs less and is more readily available.

We guarantee **METAPLUS** to outperform Trisodium Phosphate in any cleaning operation by itself or in mixtures.

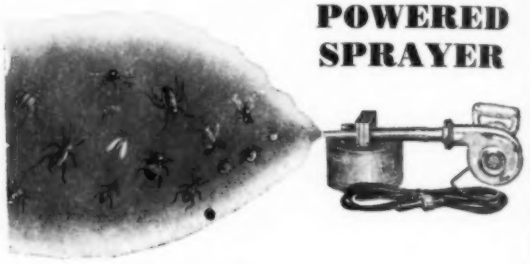
Backed by fourteen years' experience in the alkali cleaning field.

Jobbers will also be interested in our other products. Dishwashing Compounds — Driveway Cleaners.

▼ ▼ ▼

MACKENZIE LABORATORIES, INC.
Front and Yarnall Streets
Chester, Penna.

**POWERED SPRAYER**



***for BLITZING BUGS***

ADAM A. BREUER'S
ELECTRIC INSECTICIDE SPRAYERS

NO insecticide, no matter how powerful, can do its best work unless it makes contact. So be sure the Sprayer you use for spraying your insecticides has plenty of power and capacity to do the job right. You can be certain of such power and effectiveness with the ADAM A. BREUER'S ELECTRIC (motorized) INSECTICIDE SPRAYER. Shoots insecticides up to 20'. Penetrates crevices, cracks, hard-to-reach places. Four models, ¼ to 1 H.P. *Write, giving details of your problems and requirements.*

[ *We do not sell insecticides. Our business is the manufacture of Sprayers. (Patented in U. S. A. and foreign countries.)* ]

**BREUER ELECTRIC MFG. CO.** 5118 N. RAVENSWOOD AVE. CHICAGO 40, ILL.

# COLORS

*for*

| | |
|---|---|
| Toilet Soaps | Shampoos |
| Liquid Soaps | Lotions |
| Para Blocks | Hand Soaps |
| Shave Creams | Sweep Compounds |

and other Chemical Specialties

* * * *

Does your product require a *certified color* under the new law? Let us advise you, and supply you with exactly the right color for the right purpose!

## Interstate Color Co., Inc.

9 Beekman Street New York

*"Color it for greater sales appeal."*

# INDUSTRIAL CHEMICALS and RAW MATERIALS

COAL TAR PRODUCTS
ACTIVATED CARBONS
PYRETHRUM EXTRACT
CARNAUBA WAX
CAUSTIC POTASH CAUSTIC SODA
SODA ASH AROMATIC OILS
STEARIC ACID PYRIN

1900 Grant Building

CHEMICAL SALES CORPORATION OF PITTSBURGH

Phone GRant 3750

## CHEMICAL SALES CORPORATION

PITTSBURGH 19, PENNSYLVANIA

far from saturated, Vern Haag of Haag Laboratories, Inc., Chicago, declared in examining the post-war market for soaps and cleaners. Only within the last hundred years, he said, has the use of soap become in any way general. Conditions still exist in a great part of the world, comparable to the days when there was no such thing as soap for personal cleanliness. In the United States, he recalled, annual per capita consumption of soap is 25 pounds; in Great Britain 20 pounds; in Russia 6 pounds and in China one-tenth of one pound. Technological developments in many industries, such as synthetic rubber and leather tanning, he also pointed out, have opened new outlets for the products of the soap kettle.

Others who participated in the symposium on "Post-War Planning" and their topics were: Jay H. Zucker, State Chemical Mfg. Co., Cleveland, O.,—"Training Salesmen;" Marion Davis, Marion H. Davis Co., Jacksonville, Fla.,—"Planning Floor Finishing Business," Chas. Buschart, U-San-O Corp., St. Louis—"Cotton Goods Market"; and David Kreekun, Standard Chemical Co., St. Louis,—"Mechanical Floor Equipment."

The soap industry is in a much better position now than a year ago with respect to prospective supplies, the delegates were told by Dr. C. W. Lenth, chief, soap and glycerine division, fats and oils branch, War Food Administration, in a survey of The Soap Outlook.

*(Dr. Lenth's address begins on Page 28 of this issue.)*

Not until results of the coming invasion of Europe are determined will Washington give much consideration to appeals for resumption of production for civilian use, in the opinion of P. V. Cheli, of W.P.B.'s Chicago regional priorities division. "After that," he predicted, "I believe some increase in manufacture of civilian goods will be permitted.

Speaking of the trend to decentralization of war agency control he was of the opinion that Washington will not relinquish its control over certain materials, including chemicals. "The situation on supplies of chemical changes rapidly," he explained, "and may become critical over night, thus making it advisable for control to be centralized in Washington where quick action will be possible in an emergency."

Paper may become industry's No. 1 problem soon, he warned and suggested that extreme care in use of fiber shipping is strongly advisable. "Means will have to be found," he said, "for bringing back and re-using a lot of second-hand cartons."

Discussing "How to secure relief under price ceilings," V. E. Wersel of the Chicago regional OPA office asserted that OPA is not as hard on violators as the newspapers may lead you to believe." Those who run afoul of price regulations, he declared "are the men who have not contacted the OPA."

Sidney J. Bockstanz, of Bockstanz Bros. Co., Detroit, became president of the organization for the ensuing year, at the election during Wednesday's brief session. Jack Varley of Baird & McGuire, St. Louis manufacturers of insecticides, disinfectants and sanitary compounds, was elected vice president and Ludwig Wilson, Chicago, was selected as the new treasurer. Harry Apple, Milwaukee, Wis., was retained as executive secretary. In addition to the officers the new Board of Directors includes: Otto T. Schaefer, Tu-Way Products Co., Detroit; Marvin Anderson, Louisiana Paper Co., Shreveport, La.; David Ginsberg, Scientific Supply Co., Denver; Paul Mansel, American Sponge & Chamois Co., New York; Lee N. Vedder, White Mop & Wringer Co., New York; Donald Peatee, Mellocraft Co., Toledo, O.

◆

### United Chemicals Elects Geiger

Marlin G. Geiger has been elected vice president and director of the United Chemicals, Inc. Mr. Geiger served as a vice president and director of Westvaco Chlorine Products Corporation, and resident manager of the Westvaco South Charleston Plant. He will continue as resident manager of the Westvaco South Charleston plant in addition to his new duties.

### T. G. A. MEETING

*(From Page 43)*

"SURVEY OF THE AROMATIC CHEMICALS SITUATION."
by: A. L. Van Ameringen, President, van Ameringen-Haebler, Inc.

"PRESENT AND FUTURE POSITION OF ESSENTIAL OILS."
by: Francis T. Dodge, President, Dodge & Olcott Co.

"THE OUTLOOK FOR FOREIGN TRADE IN THE POST-WAR PERIOD."
by: H. B. McCoy, Chief of the Industrial Economy Division, U. S. Department of Commerce, Washington, D. C.

— Luncheon —

2:00 P. M. AN OFF - THE - RECORD VIEW OF THE WASHINGTON SCENE." by: Earl Godwin.

Closed Meeting For Cosmetic Manufacturers Only.

Election of Officers and Members of the Executive Board.

— Adjournment —

◆

### Dow's Turner to N. Y.

Maurice B. Turner of the Dow Chemical Co., Midland, Mich., has been transferred to the New York office of Dow and placed in charge of the sale of Dowicides, the insecticide and disinfectant materials, on the eastern seaboard. Mr. Turner who is well-known in the disinfectant and insecticide industries and active in scientific committee work of the N. A. I. D. M., graduated from the University of North Dakota in 1937 and has been associated with Dow Chemical since that time.

◆

### Hooker Appoints Chinnock

Hooker Electrochemical Co. has just announced the appointment of A. Vaughn Chinnock to its sales development department with head quarters at Niagara Falls, N. Y. A member of the American Chemical Society, and a 1932 Cornell graduate, Mr. Chinnock taught science for eight years. For the past four years he has been in the research and development department of Hooker, where he has been engaged in pilot plant work.

CROSBY
THE MARK OF QUALITY

PALE WOOD
# ROSINS

They will help
the soapmaker
"stretch" his fats.

CROSBY NAVAL STORES, INC.
PICAYUNE, MISSISSIPPI

# PECK'S
**Headquarters for over 25 years**

OIL SOAPS
TOILET SOAP BASES
LIQUID TOILET SOAPS (concentrated)
OIL SHAMPOOS
SURGICAL GREEN SOAPS
TINCTURE GREEN SOAP USP
U.S.P. GREEN SOAPS
POWDERED AND CHIP SOAPS
SOAP POWDERS
LIQUID FLOOR SOAPS
PEXBRITE W. WAX
FLOOR VARNISH
RUG SHAMPOO (concentrated)
DISINFECTANTS
INSECTICIDES

*Other Specialties*

Peck's PRODUCTS COMPANY
5224-40 NORTH 2nd ST., ST. LOUIS, MO.
NEW YORK . . . . KANSAS CITY

*Everything in Soaps, Disinfectants, Waxes, Etc.*

We announce development of new type soap colors

# PYLAKLORS

They have good fastness to alkali, light, tin, ageing.

The following shades are already available:

| | |
|---|---|
| Bright Green | Dark Brown |
| Olive Green | Palm Green |
| Yellow | Golden Brown |
| True Blue | Violet |

***It will pay you to send for testing samples.***

**PYLAM PRODUCTS CO., INC.**
*Manufacturing Chemists, Importers, Exporters*
799 Greenwich St. New York City
*Cable Address: "Pylamco"*

# PERFUMERS
BASIC MATERIALS

Burton Bush

We specialize in originating products to meet unusual perfume requirements for the soap and sanitary chemical industry.

•

BUSH AROMATICS, Inc.
136 Liberty Street New York 6, N. Y.

# Proposed Disinfectant Specification for Treasury Dept. Meets Criticism

THE Procurement Division of the U. S. Treasury Department has recently made public the tentative draft of a proposed new specification for disinfectant for general use. The specification emanates from J. L. Jones, Chief of the Federal Specifications Division. It is reported to have attracted critical comment from numerous firms in the industry, based principally on the fact that it is said to be discriminatory against products other than those of the quaternary ammonium type. Exception has also been taken to some of the testing requirements. The complete specification follows. Comments from the industry will be welcomed. They should be addressed to Mr. Jones, Treasury Department, Procurement Division, Washington 25, D. C.

"This specification has not been approved and is subject to further change.

TREASURY DEPARTMENT
PROCUREMENT DIVISION

Proposed Specification for
Disinfectant: General Use
February 1, 1944.

A. APPLICABLE SPECIFICATION.

A-1. There are no other specifications applicable to this specification.

B. TYPE AND GRADE.

B-1. The disinfectant, as specified herein, shall be furnished in one type and in one grade.

C. MATERIAL.

C-1. The material shall be suitable for the intended purposes and as specified hereinafter (See Note H-2).

D. GENERAL REQUIREMENTS.

D-1. The material shall be no more detrimental to the skin than U.S.P. XII Saponated Solution of Cresol, and shall be free from hypochlorites and peroxide.

E. DETAIL REQUIREMENTS.

E-1. The material shall be a free flowing liquid, and shall meet the following requirements:

E-1a. *Odor* — When diluted in accordance with paragraph F-2a, the material shall have no more than a slight odor, and shall be unobjectionable.

E-1b. *Phenol co-efficient.* — Shall be not less than 12 when tested in accordance with paragraph F-2b.

E-1c. *Solubility.* The material shall meet test specified in paragraph F-2c.

E-1d. *Detergency.* The material shall have a phenol coefficient of not less than 2.4 in the presence of trisodium phosphate when tested in accordance with paragraph F-2d.

E-1e. *Hydrogen Ion Concentration (pH value)* — A 1 per cent aqueous solution by volume shall show a pH value of not less than 6.5 nor more than 10.0 at 25° C. when tested in accordance with paragraph F-2e.

F. METHODS OF SAMPLING, INSPECTION AND TEST.

F-1. *Sampling.* When practicable an original unopened container shall be taken and submitted to the laboratory for test. When this is not practicable, a representative composite sample shall be taken, placed immediately in a clean glass bottle, sealed, and sent to the laboratory for test. The sample shall be not less than one quart nor more than one gallon.

F-2. *TESTS.*

F-2a. *Odor*—Dilute the material with distilled water at about 25° C. in the proportion of 1:200. Note the odor.

F-2b. *Phenol coefficient* — Shall be tested in accordance with the United States Food and Drug Administration standards and procedure.

F-2c. *Solubility.*—Add 2 ml of the material to 100 ml of distilled water at 20° to 25° C. in a glass stoppered cylinder. Shake thoroughly and allow to stand for two hours. The solution shall be clear and shall show no turbidity.

F-2d. *Detergency.* Determine the phenol coefficient of the material in the presence of 1.0 per cent, by weight, of trisodium phosphate in accordance with paragraph F-2b.

F-2e. *Hydrogen Ion Concentration (pH value)*—Determine the value of the hydrogen ion concentration of a 1 per cent aqueous solution, by volume, of the material at 20° to 25° C. by any convenient method.

G. PACKAGING, PACKING, AND MARKING FOR SHIPMENT.

G-1. *Packaging.* — Unless otherwise specified, commercial packages are acceptable under this specification.

G-2. *Packing.*—Unless otherwise specified, the subject commodity shall be packed in substantial commercial containers of the type, size, and kind commonly used for the purpose so constructed as to insure acceptance and safe delivery by common or other carriers at the lowest rate to the point of delivery called for in the contract or purchase order.

G-3. *Marking.*

G-3a. *Issue Packages.*—Unless otherwise specified, issue packages shall be marked with the name of the material, the quantity contained therein and the name or trademark of the contractor. In addition there shall be provided dilution directions for general use.

G-3b. *Shipping Containers.* — Unless otherwise specified, shipping containers shall be marked with the name of the material and the quantity contained therein, as defined by the contract or order under which the shipment is made, the name of the contractor, and the number of the contract or order.

H. NOTES.

H-1. Purchasers should exercise any desired options offered herein.

H-2. The material as covered by this specification is intended for general disinfecting uses.

H-3. It is believed that this specification adequately describes the characteristics necessary to secure the desired material and that normally no sample will be necessary prior to award to determine compliance with this specification. If, for any particular purpose, samples with bids are necessary, they should be specifically asked for in the invitation for bids, and the particular purpose to be served by the bid sample should be definitely stated, the specification to apply in all other respects.

H-4. Copies of this specification may be obtained without cost upon application to the Treasury Department, Procurement Division, Washington, D. C.

## Norda, Ltd. Replaces Burned Plant

One of three plants of Norda, Ltd., Toronto, Canada, where distillation of Canadian products has been carried out, was destroyed recently by fire. New quarters in Vankleek Hill, Ontario, have been acquired and H. D. McMillan has been appointed as the new local manager to have charge of the reconstruction program. The firm also has distilling plants at Glen Robinson and Alexandria, Ontario, for oil of cedarleaf, and at Ste. Alphonse and Notre Dame de la Merci for distilling Canadian fir needle oil, oil of hemlock and oil of spruce. Plans are also in prospect for another unit in the Province of Quebec.

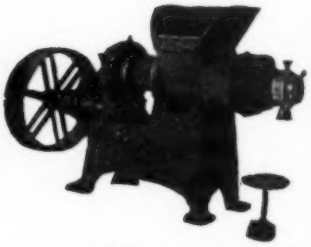
## Peck Returns to Aridor

R. G. Peck, Jr., vice-president and assistant general manager of The Aridor Company, metal screw cap manufacturers, has returned to full time duty at the Chicago plant, after serving in Washington for the past seven months in an advisory capacity with the Glass Container & Closure Section of the Container Division of the War Production Board. Temporarily, he will still be available to the W.P.B. as consultant on closures for glass containers.

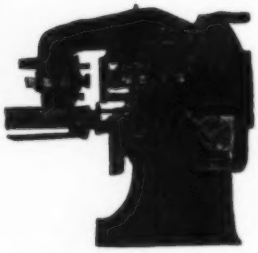
*Special Offerings of* **SOAP MACHINERY** *Completely Rebuilt!*

Newman's BRAND NEW Steel Steam Jacketed SOAP CRUTCHERS Sizes 1,000 to 10,000 lbs.

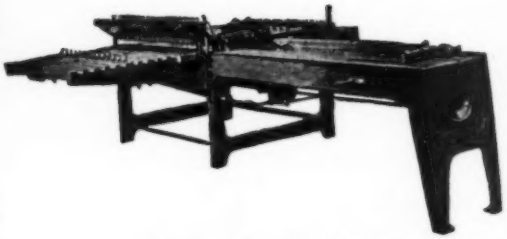
SOAP POWDER MILLS
Sizes 10A and 14



Single screw soap plodders with 6, 8, 10 or 12 inch screws. All completely rebuilt and unconditionally guaranteed.



4 JONES AUTOMATIC combination laundry and toilet soap presses. All complete and in perfect condition.



2 Automatic Power Soap Cutting Tables.

**INVESTIGATE THESE SPECIAL BARGAINS**

•

**Johnson Automatic Soap Chip Filling, Weighing and Sealing Machines for 2 lb. and 5 lb. Packages guaranteed in perfect condition.**

•

### *ADDITIONAL REBUILT SOAP MACHINERY*

*All used equipment rebuilt in our own shops and guaranteed first class condition.*

- H-A, 1500, 3000, 4000, 5000 lbs. capacity. Steam Jacketed Crutchers.
- Dopp Steam Jacketed Crutchers, 1000, 1200, 1500 lbs. and 800 gals. capacity.
- Ralston Automatic Soap Presses.
- Scouring Soap Presses.
- Empire State, Dopp & Crosby Foot Presses.
- 2, 3, 4, 5 and 6 roll Granite Toilet Soap Mills.
- H-A 4 and 5 roll Steel Mills.
- H-A Automatic and Hand-Power slabbers.
- Proctor & Schwartz Bar Soap Dryers.
- Blanchard No. 10-A and No. 14 Soap Powder Mills.
- J. H. Day Jaw Soap Crusher.
- H-A 6, 8 and 10 inch Single Screw Plodders.
- Allbright-Nell 10 inch Plodders.
- Filling and Weighing Machine for Flakes, Powders, etc.
- Steel Soap frames, all sizes.
- Steam Jacketed Soap Remelters.
- Automatic Soap Wrapping Machines.
- Glycerin Evaporators, Pumps.
- Sperry Cast Iron Square Filter Presses, 10, 12, 18, 24, 30 and 36 inch.
- Perrin 18 inch Filter Press with Jacketed Plates.
- Gedge-Gray Mixers, 25 to 6000 lbs. capacity, with and without Sifter Tops.
- Day Grinding and Sifting Machinery.
- Schultz-O'Neill Mills.
- Day Pony Mixers.
- Gardiner Sifter and Mixer.
- Proctor & Schwartz large roll Soap Chip Dryers complete.
- Doll Steam Jacketed Soap Crutchers, 1000, 1200 and 1350 lbs. capacity.
- Day Talcum Powder Mixers.
- All types and sizes—Tanks and Kettles.
- Ralston and H-A Automatic Cutting Tables.
- Soap Dies for Foot and Automatic Presses.
- Broughton Soap Powder Mixers.
- Williams Crutcher and Pulverizer.
- National Filling and Weighing Machines.

***Send us a list of your surplus equipment— we buy separate units or complete plants.***

## NEWMAN TALLOW & SOAP MACHINERY COMPANY

1051 WEST 35th STREET, CHICAGO — Phone Yards 3665-3666

***Our Forty Years Soap Experience Can Help Solve Your Problems***

# PROFESSIONAL DIRECTORY


**FOSTER D. SNELL, Inc.**

Our staff of chemists, engineers and bacteriologists with laboratories for analysis, research, physical testing and bacteriology are prepared to render you

*Every Form of Chemical Service*

313 Washington St., Brooklyn, N. Y.

**CHEMICAL ENGINEERS**

Contracting — Consulting

Complete Plants and Engineering Services for:

Glycerine — Fats and Oils
Soaps — Hydrogenation
Fatty Acids — Hydrogen
Research, Reports, Investigations

**WURSTER & SANGER, INC.**

52nd Street and S. Kenwood Avenue
Chicago, Illinois

**Stillwell and Gladding, Inc.**

*Analytical and Consulting Chemists*

Members Association of Consulting Chemists and Chemical Engineers

130 Cedar St., New York City 6

**PATENTS—TRADE MARKS**

All cases submitted given personal attention

Form "Evidence of Conception" with instructions for use and "Schedule of Government and Attorneys' Fees"—Free.

**Lancaster, Allwine & Rommel**

PATENT LAW OFFICES

Suite 402, Bowen Bldg., Washington, D. C.

H. A. SEIL, Ph.D. E. B. Putt, Ph.C., B.Sc.

**SEIL, PUTT & RUSBY, Inc.**

*Analytical and Consulting Chemists*

Specialists in the Analysis of Organic Insecticides, Pyrethrum Flowers, Derris Root, Barbasco, or Cube Root—Their Concentrates and Finished Preparations

DRUGS—ESSENTIAL OILS — SOAP

16 East 34th St., New York 16, N. Y.

**SKINNER & SHERMAN, INC.**

246 Stuart Street Boston, Mass.

*Bacteriologists and Chemists*

Disinfectants tested for Phenol Coefficient. Toxicity Index determined by chick embryo method of Salle. Antiseptics tested by agar cup plate and other standard methods.

Chemical Analyses and Tests of All Kinds


## CLASSIFIED

**Classified Advertising** — All classified advertisements will be charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap & Sanitary Chemicals*, 254 West 31st St., New York.

## Positions Wanted

**Patented Dishwashing Submerge Dispenser:** Sole owner and inventor wants connection with manufacturer of dishwashing compounds. Will offer services, years of experience, as sales manager, salesman. This submerge dishwashing dispenser is the only type of its kind recently patented. Salary and bonus arrangement can be made. Address Box No. 702, care *Soap & Sanitary Chemicals.*

## Positions Open

**Chemical Sales Engineer Wanted:** By well established small company in Michigan, experienced in industrial metal cleaning and general cleaning compounds. One with following preferred, but not absolutely necessary. Good personality essential. Have excellent opportunity for right party. Bulk of our business is with automotive industries and post war possibilities are excellent. Give all particulars and enclose snapshot if possible. All replies strictly confidential. Address Box No. 706, care *Soap & Sanitary Chemicals.*

**Patented Detergent:** Wanted salesmen or sales organizations to handle special patented detergent selling to truck and bus fleets, ice cream and dairy trades. Now being used by outstanding companies. Write for further details. Address Box No. 701, care *Soap & Sanitary Chemicals.*

**Chemist Wanted:** Experienced in the manufacture of floor wax, polishes and soaps. State age, experience, education, and salary desired. R. M. Hollingshead Corp., 16th & Mickle Sts., Camden, New Jersey.

**Chemist Wanted:** Massachusetts Plant. Must be familiar with liquid soaps, floor waxes, draft exempt. State age, experience, salary desired. Address Box No. 704, care *Soap & Sanitary Chemicals.*

**Technical Service Laboratory Opportunity:** Interesting, creative and remunerative position essential to war effort for chemist or chemical engineer having knowledge of cleaning, plating and finishing metals. Permanent position with large chemical manufacturer. Good academic training essential with some industrial experience desirable. Opportunity for association with a research minded organization, in professional environment and pleasant surroundings. Address Box No. 705, care *Soap & Sanitary Chemicals.*

***Simple — Practical — Durable — Inexpensive***

The 4 in 1 Applicator consists of but three parts:

1—A top quality sleeve-like wool pad;
2—A one piece hardwood block that needs no bolts, no nuts, no metal fastenings of any kind;
3—A hardwood threaded handle.

The 4 in 1 Applicator gives you more square inches of usable wool pad for your money.
The 4 in 1 Applicator insures perfect application of your floor waxes, seals and other finishes for every type of floor.

***Profitable to Use — Profitable to Sell***

Used and recommended by maintenance experts nationwide.

**American Standard Manufacturing Company**
2509-2513 South Green Street Chicago 8, Ill.

**THIS is the CRUCIAL YEAR**

**KEEP up PRODUCTION with CONSOLIDATED EQUIPMENT**

1—Blanchard #10-A Soap Mill.
1—Dopp Vertical Jacketed Soap Crutcher, 1500#.
3—Ralston Automatic Soap Presses.
3—Pkge. Machy. Co. Soap Wrapping Machines, Type N1.
60—Assorted Bronze Soap Dies.
1—Houchin 10" Jumbo Plodder.
1—Broughton 1500# Mixer; 1—450#.
6—Anderson #1 Expellers, with Feeders, Tempering Apparatus, 15 H.P. AC Motors—rebuilt.

| | | |
|---|---|---|
| Crutchers | Foot and Automatic Soap Presses | Filter Presses |
| Soap Kettles | Cutting Tables | Soap Frames |
| Powder Mixers | Pulverizers | Powder Fillers |
| Granite Mills | Soap Pumps | Labellers |
| Plodders | Soap Chippers | Tanks |
| Slabbers | | Boilers |

***Send for Illustrated Circular***

**CONSOLIDATED PRODUCTS CO., INC.**
15-21 PARK ROW NEW YORK, N. Y.
BArclay 7-0600 Cable Address: Equipment
*We buy your idle machinery—Send us a list.*

**GREATER *Kills*** with **CERTOX**
REG. U. S. PAT. OFF.

**Rodent Seed, Ant Jelly, Arsenic, Carbolic, Pyrethrum, Cresylic, Red Squill, Derris Powder,** and other effective chemicals that do a thorough job for the Pest Controller. The quality of CERTOX products remains unaffected by the national emergency. Prices, too, are near normal.

**YOUR GUARANTEE:**

All CERTOX products are manufactured according to exacting specifications under personal supervision of I. H. LUTTAN, B. S. A., Entomologist.

*SPECIAL CONTRACT PRICES*
*Available to Cover your Annual Needs.*

**YORK CHEMICAL CO.**
*Suppliers of Complete Exterminating Chemicals.*
**424 West 18th Street, New York, N.Y.**

**SOPAC**
**SAFETY HAND SOAP**
**(Powdered)**

A money-maker for alert jobbers calling on industrial plants and institutions.

★ Hygienically safe—fast and economical
★ Non-abrasive, vegetable oil base
★ Soothing with fine after-effect
★ Tested and approved by millions of safe washups in plants throughout the country
★ Unsurpassed quality and value
★ Free samples available for established jobbers

Other items in the Skotch Products line include dishwashing compounds, medium and heavy duty cleaners, liquid soap concentrate, special formula compounds and powdered soap dispensers.

**SKOTCH PRODUCTS CORP.**
1220 W. SIXTH ST. CLEVELAND, OHIO

## Miscellaneous

**Announcement:** On May 1st, 1944, we will be located at our new quarters, 225 West 34th Street, New York, 1, N. Y. We wish to thank you for your share in making this possible. Send for our removal sale circular listing attractive purchases of Soap Machinery. Brill Equipment Co., 225 West 34th St., New York, 1, N. Y.

**For Sale:** 2—5 Roll water cooled inclined steel roller mills, 16" dia. x 40" face. Houchin-Aiken Foot Presses; Soap Frames; Cutting Tables; Plodders, 12 x 30 and 16 x 40; Three Roll Water Cooled Steel Mills; 4 Roll Stone Mills; Dryers; Chippers; Powder Fillers; Mixers; Grinders; Filter Presses; Disc Filters; Pumps, etc. Send for Soap Bulletin No. 402. We Buy Your Surplus Equipment for Cash. Stein Equipment Corporation, 426 Broome Street, New York City, 13.

**For Sale:** New No. 1721 Gruendler Wood Hog and Shredder, Size No. XXA. For grinding clays or many other products. Bell Lumber Co., P. O. Box 632, Green Bay, Wis.

**Unusual opportunity** for soap maker or chemist to buy a well established and profitable grease, and shop fats route and a soap distributing business, covering all hotels, restaurants, and institutions in an area (3) million people. Foundation now laid to start the manufacture of soap and the rendering business. Own our office, warehouse, trucks and much other equipment, no incumbrance. Present owner desires to retire and does not wish to make the additional investment necessary to expand the business. Full investigation invited by responsible parties, $35,000.00 required to handle the deal. Address Box No. 703, care *Soap & Sanitary Chemicals.*

**Nailing Machines Wanted:** We want used Morgan or Doig wood box Nailing Machines at once. State make, size, best cash price. Chas. N. Braun Machinery Co., Fort Wayne, Indiana.

**Will Purchase Immediately —** Pneumatic Packaging Machine, used for chips, powder, cleanser; also dry mixers, chip dryers, crutchers, and automatic soap press. Address Box No. 707, care *Soap & Sanitary Chemicals.*

**An old established firm** in the Northwest, manufacturing a varied line of soap products, jobbing janitorial supplies and chemicals, brokers in car lots direct to trade, specializing to the buildings, hospitals, manufacturing plants, garages, lumber camps, etc. are looking for new lines that can be sold to this class of trade. Reference—Dun & Bradstreet. Western Soap Company, Spokane, 2, Washington.

**Machinery For Sale:** 1—20,000 lbs. Horizontal Crutcher; 1—16,000 lbs. Horizontal Crutcher; 65 HP Steam Engine, line shafting and Drives. Miscellaneous Steel Caustic Tanks and other soap manufacturing equipment. Advance Solvents & Chemical Corp., 315 Coles St., Jersey City, N. J.

**Floor Brushes** — We manufacture a very complete line. Catalogue sent upon request. Flour City Brush Company, Minneapolis, Minn., or Pacific Coast Brush Co., Los Angeles, Calif.

### Seed Disinfectant

Powdered water-soluble chromates mixed with a filler are used as dry grain disinfectants. E. Tornow, German Patent No. 732,130.


MIRVALE

CRESYLIC ACID
• • •
HIGH BOILING TAR ACIDS
• • •
NAPHTHALENE
• • •
TAR ACID CREOSOTE OIL
• • •

MIRVALE CHEMICAL CO. LTD.
MIRFIELD, YORKS.
ENGLAND

ROTENONE goes to WAR!

Recognizing its strategic value in the control of certain insects and pests, the use of Rotenone has been restricted to the needs of the Armed Forces, the protection of a limited number of vital agricultural crops, and the control of warble fly on cattle.

Many peace-time users of Rotenone for other purposes have had to readjust their plans to get along without Rotenone, and have done this willingly, appreciating that Rotenone has an important job to do in the winning of the war.

Those who need Rotenone for the specific purposes for which it is now reserved will be glad to know that we have still available supplies of **ROTENONE** and **ROTENONE RESINS** and from time to time expect to have **ROTENONE POWDERS.**

DERRIS, INC.

Specialists In Rotenone Roots and Rotenone Products

79 WALL STREET NEW YORK, N. Y.

# TRI SODIUM PHOSPHATE

## JOHN A. CHEW
INCORPORATED

60 E. 42nd ST. MU. 2-0993

NEW YORK CITY

BRAID-O-PAD
FOR FLOOR MACHINES
A "Must" for Floor Maintenance
BRAID-O-PAD has steel wool strands running in all directions, and these strands are continually presenting fresh cutting surfaces. During the entire life of this pad, there is no loss of efficiency. This is because the pad retains its original shape and the braided strands of steel wool remain in the same relation to each other at all times during its use.
AMERICAN STEEL WOOL MFG. CO. INC.
42-24 ORCHARD ST. The Pioneer Steel Wool Manufacturer LONG ISLAND CITY, N.Y.



2 Profit-makers for

Sanitary Supply Houses—

PER-MO

RAT and MICE EXTERMINATING "LIQUID"

This tested exterminator is fatal to rodents. Can be used in liquid form or on baits. Keep it in stock and sell it to your regular customers with other sanitary supplies. "Per-Mo" is a profitable item!

PER-MO

MOTHPROOFING LIQUID

Let your customers do their own mothproofing with "Per-Mo." The Guaranteed Mothproof Liquid. It acts like a colorless dye in impregnating fabrics, has no odor and will not spot or stain. Literature and Full Particulars first letter.

•

PER-MO MOTHPROOF CO.

3729 S. VIRGINIA AVENUE

KANSAS CITY 3, MO.



## MAY A RUBLESS WAX BE LABELED "NON-SKID" . . . "SLIP PROOF"?

You will find the answer on page 134 of SANITARY PRODUCTS — new practical text on manufacture, testing and use of sanitary specialties written by Leonard Schwarcz.

**300 Pages—$5.00**

*Order from the Publishers*

MACNAIR-DORLAND COMPANY

254 West 31st Street • New York 1, N. Y.

# INDEX TO ADVERTISERS

* For further details see announcement in 1944 SOAP BLUE BOOK


*American-British Chemical Supplies ..... 68
American Standard Mfg. Co. ..... 130
American Steel Wool Mfg. Co. ..... 132
Anchor-Hocking Glass Co. ..... 79
*Aromatic Products, Inc. ..... 4th Cover
*Associated Chemists, Inc. ..... 73
*Baird & McGuire, Inc. ..... 100
*Barrett Co. ..... April
*Bobrick Mfg. Co. ..... April
*Breuer Electric Mfg. Co. ..... 124
Buckingham Wax Co. ..... April
Bush Aromatics ..... 126
*Candy & Co. ..... April
Canner, The ..... April
*Carbide & Carbon Chemicals Corp. ..... April
Philip Carey Mfg. Co. ..... 114
Chemical Mfg. & Dist. Co. ..... April
Chemical Sales Corp. ..... 124
Chemical Supply Co. ..... 118
John A. Chew, Inc. ..... 132
*Antoine Chiris Co. ..... April
Cole Laboratories ..... 92
*Columbia Chemical Division ..... April
Compagnie Parento ..... April
*Consolidated Products Co. ..... 130
*Continental Can Co. ..... April
Cornelius Products Co. ..... April
Crosby Naval Stores ..... 126
*Crown Can Co. ..... 46
*Davies-Young Soap Co. ..... 18
*Derris, Inc. ..... 131
*Diamond Alkali Co. ..... April
*Dodge & Olcott Co. ..... 8, 85
*Dow Chemical Co. ..... 40
E. F. Drew & Co. ..... 50
P. R. Dreyer Inc. ..... 69
*E. I. du Pont de Nemours & Co. ..... 52
*Eastern Industries ..... 36
Emery Industries, Inc. ..... 16
Federal Tool Corp. ..... 54
*Federal Varnish Co. ..... 98
*Felton Chemical Co. ..... 15, 72
Filtrol Corporation ..... 54
*Firmenich & Co. ..... 7
*Florasynth Laboratories ..... 17
Fritzsche Brothers, Inc. ..... 42
*Fuld Brothers ..... 3
General Chemical Co. ..... 14
*General Drug Co. ..... 2nd Cover
*R. Gesell, Inc. ..... April
*Givaudan-Delawanna, Inc. ..... 12, 13
A. Gross & Co. ..... 64
*Haag Laboratories ..... 122
*W. C. Hardesty Co. ..... 53
Hercules Powder Co. ..... 106
Hodgman Rubber Co. ..... April
*Hooker Electrochemical Co. ..... 6
*Houchin Machinery Co. ..... 58
Huber Machine Co. ..... 122
*Hysan Products Co. ..... 9
Industrial Chemical Sales Division
W. Va. Pulp & Paper Co. ..... 56
*Innis, Speiden & Co. ..... April
Institutions Magazine ..... 84
Interstate Color Co. ..... 124
R. A. Jones & Co. ..... 22
Ken-Ya-Pye ..... April
Karl Kiefer Machine Co. ..... 60
*Koppers Co. ..... 97
Kranich Soap Co. ..... 98
*Lancaster, Allwine & Rommel ..... 129
*J. M. Lehmann Co. ..... April
*Geo. Lueders & Co. ..... April
MacKenzie Laboratories ..... 124
*Magnus, Mabee & Reynard, Inc. ..... 72
*N. I. Malmstrom & Co. ..... 20
*M. & H. Laboratories ..... 118
Mantrose Corp. ..... April
Maryland Glass Corp. ..... April
Mirvale Chem. Co. ..... 131
Monsanto Chemical Co. ..... 4
National Can Co. ..... 74, 75
National Oil Products Co. ..... 90
*Newman Tallow & Soap Machinery Co. ..... 128
*Niagara Alkali Co. ..... Facing 38
Norda Essential Oil & Chemical Co. ..... 10
Olsen Publishing Co. ..... 76
*Orbis Products Co. ..... April
Owens-Illinois Glass Co. ..... 89
Peck's Products Co. ..... 126
*S. B. Penick & Co. ..... 87
*Pennsylvania Refining Co. ..... 116
Per-Mo Mothproof Co. ..... 132
Philadelphia Quartz Co. ..... 44
Philipp Brothers, Inc. ..... 122
*Pittsburgh Coal Carbonization Co. ..... April
*Pittsburgh Plate Glass Co. ..... April
*John Powell & Co. ..... 71
*R. J. Prentiss & Co. ..... 80
*Proctor & Schwartz, Inc. ..... April
Pumice Corp. of America ..... 64
*Pylam Products Co. ..... 126
*Reilly Tar & Chemical Co. ..... 114
W. C. Ritchie & Co. ..... April
*Rohm & Haas Co. ..... 108
Sanitary Soap Co. ..... 112
*C. G. Sargent's Sons Corp. ..... 66
*Schimmel & Co. ..... 48
Seil, Putt & Rusby ..... 129
Shawmut Specialty Co. ..... 78
Shell Oil Co. ..... 95
*Skinner & Sherman ..... 129
*Skotch Products Corp. ..... 130
Foster D. Snell ..... 129
*Solvay Sales Corp. ..... 93, 3rd Cover
*L. Sonneborn Sons, Inc. ..... 88
Sparhawk Co. ..... 99
Standard Alcohol Co. ..... April
Standard Silicate Co. ..... April
*Standard Synthetics, Inc ..... 91
Stillwell & Gladding ..... 129
Stokes & Smith Co. ..... April
*Tombarel Products Corp. ..... April
Triangle Package Mchy. Co. ..... 55
Jos. Turner & Co. ..... April
*Uncle Sam Chemical Co. ..... 99
Ungerer & Co. ..... Front Cover
Union Bag & Paper Corp. ..... 66
*Union Carbide & Carbon Corp. ..... April
U. S. Industrial Chemicals, Inc. ..... Between 62-63
*Van Ameringen-Haebler, Inc. ..... 19, 81
*Velsicol Corp. ..... 83
*T. F. Washburn Co. ..... 112
Norman D. Waters & Assts. ..... 21
*Welch, Holme & Clark Co. ..... 68
Western Chemical & Mfg. Co. ..... 116
Whittaker, Clark & Daniels ..... 64
*Woburn Chemical Corp. ..... 67
*Wurster & Sanger, Inc. ..... 129
Wyandotte Chemicals Corp. ..... 11
York Chemical Co. ..... 130


*Every effort is made to keep this index free of errors, but no responsibility is assumed for any omissions.*

*"Jus' write to de President, Cuthbert, an' tell 'im no D.D.T., no victory garden!"*

# Plant Now!...

**NOW is the time to do your spade work and planting . . . not only in a victory garden, but in planning your post-war advertising and sales campaigns . . . regular advertising now can and does keep your products and your firm constantly in the minds of those who will buy your goods when the sales road again becomes rough and rocky . . . regular advertising today can help your firm to harvest a better sales crop after the war . . .**

**If you would plant sales seeds now with a view to increasing your business in the fields of soap products, insecticides, disinfectants, and allied chemical specialties, we suggest regular advertising in**

**SOAP** *and Sanitary Chemicals*

254 WEST 31st STREET NEW YORK 1

*Member Audit Bureau of Circulations*


## Tale Ends

GLYCERINE item . . . salesmen for refiners are out pushing buyers to take on more glycerine. How times do change!

* * *

Shaving bowl of 18K solid gold . . . the latest thing in shave products by House for Men, Inc., Chicago . . . retails for a mere $1,875 plus 20 per cent U. S. tax . . . a neat little trinket to put in daddy's sock next Xmas! Or a plastic replica for $1.50. Smart merchandising!

* * *

Gasoline situation improves . . . BIMS of N. Y. will hold three golf tournaments this season . . . BIMS of Boston have not announced their dates thus far.

* * *

Mosquitoes do not have sufficient wing surface to fly, according to entomologists, said a recent news report. But the mosquitoes, being short on entomological training and not knowing this, fly anyway. There is probably a moral hidden away here somewhere, but we can't locate it at the moment.

* * *

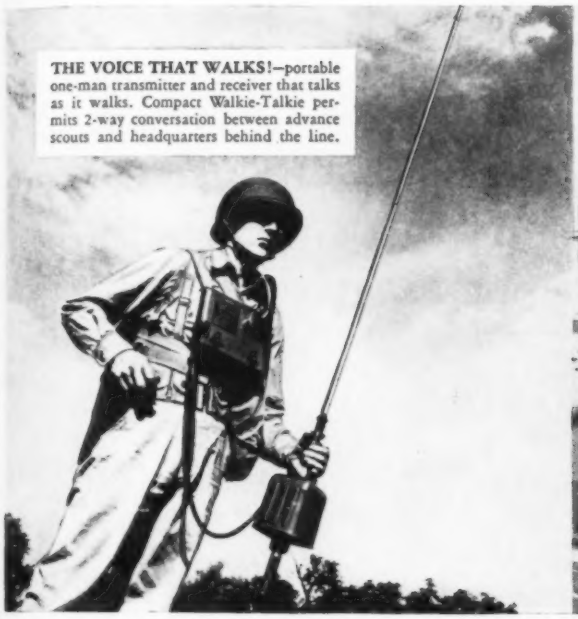
All sorts of rumors are still heard about DDT. Word has lately come out of Washington, that the armed forces are now willing that a portion of DDT production be allocated to agriculture for use this summer. Looks like a feather in the cap of WFA. Also gossip has it that the Navy insists that its louse powder be 100 mesh or finer and that some DDT producers are having difficulty making it this fine. Just gossip,—but interesting!

* * *

Bombed England has suffered such serious increases in its rodent infestations that the Ministry of Supply is reported subsidizing the cat population as a control measure. Cats are officially enrolled in the rodent control brigade, given stations in factories, warehouses, stores, etc., and allowances of four to six cents per day are made for their maintenance.

# SOLVAY*

## ...KEYED TO TODAY AND TOMORROW!



**THE VOICE THAT WALKS!**—portable one-man transmitter and receiver that talks as it walks. Compact Walkie-Talkie permits 2-way conversation between advance scouts and headquarters behind the line.

**MAGIC VOICE OF 194?**—a marvel of electronic and design engineering, the handy-talkie of tomorrow will provide exciting two-way communication. Compactly housed, it will feature the latest in F.M.

***Today*** . . . Solvay Alkalies including Soda Ash, Caustic Soda and many other important related products are indispensable to manufacturers of electronic and communication instruments. These chemicals, employed in many vital operations, are supplied by 3 strategically located plants. Established in 1881, Solvay is America's largest source of alkalies.

***Tomorrow*** . . . Solvay's progressive research will pace progress in the electronic field with newly developed chemicals. With extensive resources, facilities, and experience, Solvay will continue to manufacture the best of alkalies and help industries make new products. It will serve industry with comprehensive information and technical service.

**SOLVAY**
TRADE MARK REG. U. S. PAT. OFF.

***The Solvay Process Company employs salt, limestone and ammonia to make Soda Ash, from which basic material Caustic Soda and other alkalies are derived.***

**SODA ASH • CAUSTIC SODA**
AMMONIUM CHLORIDE • CAUSTIC POTASH
MODIFIED SODAS • AMMONIUM BICARBONATE
SODIUM NITRITE • PARA-DICHLOROBENZENE
CALCIUM CHLORIDE • CHLORINE • SALT
POTASSIUM CARBONATE

**SOLVAY SALES CORPORATION**
*Alkalies and Chemical Products Manufactured by The Solvay Process Company*
**40 RECTOR STREET NEW YORK 6, N. Y.**
BRANCH SALES OFFICES:
Boston • Charlotte • Chicago • Cincinnati • Cleveland • Detroit
New Orleans • New York • Philadelphia • Pittsburgh • St. Louis • Syracuse

# KLENZ-AIRE DEODORANT OILS

## MAKE A FINISHED DEODORANT SPRAY for only 60¢ A GALLON

There is a great field for a deodorant of this type. It kills all tobacco, cooking, theatre and tavern odors. It purifies the air of any public place where crowds assemble. A little of this finished spray solution used by means of a spray directly into public urinals will have an instant and efficient deodorizing effect.

Order a trial pound and convince yourself that Klenz-Aire Deodorant Oils are the most inexpensive all-purpose deodorants you have ever used.

## ODORS AVAILABLE

| | | |
|---|---|---|
| ANTISEPTIC | HONEYSUCKLE | ORIENTAL |
| BOUQUET | JASMIN | PINE NEEDLE |
| CEDAR | LAVENDER | ROSE |
| CLOVER | LILAC | SANDALWOOD |
| EUCALYPTUS | MINT | TREFLE |
| GARDENIA | NEW MOWN HAY | WISTERIA |

**AROMATIC PRODUCTS, INC.**

15 EAST 30th STREET • NEW YORK 16, N. Y.

ATLANTA • CHICAGO • DALLAS • PITTSBURGH

MEMPHIS • SAN FRANCISCO • LOS ANGELES